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Expanding the range of the First Step to Success intervention: Tertiary-level support for children, teachers, and families

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ABSTRACT

This study presents the findings of a quasi-experimental feasibility study examining the Tertiary First Step intervention, an enhanced version of the First Step to Success early intervention program. Tertiary First Step was developed to engage families more effectively and influence and improve parenting practices for children having challenging behavior. Process (fidelity, dosage, and social validity) and outcome data were collected for all participants in the Tertiary First Step condition ($N = 33$). Parent- and teacher-reported outcomes were collected for the comparison condition ($N = 22$). Process data suggest the intervention was implemented with fidelity, and that teachers, parents, and coaches perceived the intervention as socially valid. This study presents the first empirical examination of the Tertiary Frist Step variation. The outcomes provide compelling evidence that the Tertiary First Step intervention is promising for improving student outcomes on social-behavioral indices, decreasing problem behavior, and improving academic engaged time.

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Introduction

Successfully navigating the social and behavioral expectations of today's schools and classrooms is a challenging undertaking for young children. This task requires the acquisition of a series of social-behavioral competencies including the ability to self-regulate, initiate positive interactions with teachers and peers, attend to instruction, and engage in academic tasks (Walker, Ramsey, & Gresham, 2004). Children who are unsuccessful in meeting these expectations often experience teacher and peer rejection and have less than satisfactory teacher and peer relationships (Kegan, 1990). Unfortunately, there has been a sharp increase in the incidence of children who begin their school careers unable to navigate these expectations (McCabe, Hernandez, Lara, & Brooks-Gunn, 2000). Children, whose serious school adjustment and behavior problems persist, are at risk for school social and emotional failure and detrimental outcomes later in life including possible affiliation with disruptive peer groups, juvenile delinquency, truancy, and school dropout (Patterson, Reid, & Dishion, 1992; Reid, 1993).

Intervening early in the school careers of these children is important and has been the focus of immense effort on the part of public, private, and national systems of education and research. Since the introduction of the Response to Intervention framework (Batsche et al., 2005), these efforts have been categorized based on a child's educational and social needs at three levels: (a) universal support (primary prevention), (b) targeted support (secondary prevention) and (c) intensive, individualized support (tertiary prevention). This approach, with its origin in the public health field, emerged as a model to address health concerns and evolved in the direction of public school application and subsequently early education. In a comprehensive review and analysis of more than 2000 articles published between 1990 and 2006 on school-based, mental health interventions for at-risk students, Hoagwood et al. (2007) identified 64 methodologically rigorous studies for inclusion. Of these, 24 examined both educational and mental health outcomes, and only 15 of these studies showed a positive impact on both outcomes. Of the remaining 15, 11 included home and school components with a focus on engaging and coordinating the efforts of parents and teachers. Hoagwood and her associates also

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noted that school interventions judged as effective for students requiring tertiary-level prevention strategies contain a well-designed and intensive family component to deliver the necessary strength and dosage levels to impact substantively school outcomes as well as address the focus on student's social, emotional, and mental health problems. In addition to including a family component, the empirical literature advocates for interventions that are sufficiently flexible to be responsive to the unique situations and needs of families requiring intensive, individualized support. Hoagwood et al.'s review included effective secondary prevention programs such as The Incredible Years (Reid, Webster-Stratton, & Hammond, 2003; Webster-Stratton, Reid, & Hammond, 2004) and First Step to Success (Walker et al., 1997), but did not include any programs designed to address the complex needs of children and families requiring tertiary level support.

First Step to Success is an early intervention program designed for at-risk elementary school children in the primary grades (K-3) who show clear signs of emerging externalizing behavior patterns including aggression toward others, oppositional-defiant behavior, tantrums, rule infractions, and confrontations with peers and adults (Walker et al., 1997). The behaviorally at-risk student is the primary focus of the First Step to Success program; however, teachers, peers, and parents are crucial intervention agents whose participation is under the direction and supervision of a trained First Step behavioral coach. This professional is frequently a related service provider (e.g., school social worker, school counselor, school psychologist, behavioral specialists, special educator), and has overall responsibility for coordinating the intervention.

The First Step intervention was developed through a model development grant (1992–1996) from the U.S. Office of Special Education Programs and was a cooperative effort between investigators at the University of Oregon, the Oregon Social Learning Center, and the Oregon Research Institute. In the past two decades, the First Step program has been the focus of a large number of federal and state-funded grants to support a range of research activities centering on its initial validation, replication, efficacy, and effectiveness. These grants have also supported examining the use of the program with students exhibiting elevated ADHD symptomatology (Seeley et al., 2009) and other student subpopulations (Feil et al., 2014; Frey, Small, et al., 2013). A recently released overview of the evidence base for the First Step to Success Early Intervention program summarizes research efforts and empirical outcomes that document the program as both efficacious and effective (Walker et al., 2014). The efficacy of the First Step intervention has been replicated repeatedly (Loman, Rodriguez, & Horner, 2010; Walker et al., 1998; Walker et al., 2009). Overall, this body of empirical evidence demonstrated the First Step intervention is socially valid, can be implemented with fidelity, and is associated with decreases in problem behavior, increases in social competency, and improvements in academically engaged time. A description of the First Step program's complete research and development history along with its evidence-base is contained in Walker et al. (2012). This comprehensive description also has appendices containing respectively (1) a listing of key First Step journal and chapter publications and (2) compilations of recommended lists of early interventions for behaviorally at-risk children (in which First Step was included) that were assembled and broadly disseminated by federal agencies and advocacy groups.

A mixture of experimental, quasi-experimental, and replication designs, involving group randomized and single case research methods, have been used to establish the First Step evidence base. First Step has been the focus of three randomized controlled trials to date—two of which were efficacy trials and one that was a national effectiveness study of the program's effects involving five sites across the U.S. and 286 participants in grades K-3. The First Step program has been implemented successfully in Canada, Australia, the Netherlands, and Turkey. First Step has also been successfully implemented with American Indian, African American, and Native Hawaiian students. In 2013, the First Step program was certified as a promising practice after a review by the What Works Clearinghouse of the Institute for Education Sciences.

Walker et al. (2014) noted that students having the most severe impairments have highly variable and sometimes unsatisfactory responses to the First Step program. Additionally, this review demonstrates that the intervention consistently has less dramatic impact on behavior in the home than the school setting. One possible explanation for the finding of inconsistent results with more severe children is that the homeBase component of First Step does not provide a similar intensity or dosage of the First Step intervention in the setting, as the school component does for the student in the classroom. Another explanation may be that the family component has not been successful at engaging and fostering parental motivation to change their parenting practices so as to positively impact child outcomes.

In a classic study of parent noncompliance within mental health settings, Patterson and Forgatch (1985) demonstrated that therapists' efforts to change parental behavior through direct teaching elicited immediate parent noncompliance, whereas efforts to support parents decreased the likelihood of their noncompliance. Patterson and Chamberlain (1994) have systematically studied parental resistance, and concluded that parental motivation to change is a critical yet often neglected ingredient in improving parenting practices. Thus, the need for school mental health interventions that include a home component and attend carefully to parent engagement, motivation, and follow through is substantial. In fact, the importance of engaging families is recognized as one of eight themes requiring systematic attention in order for the field of school mental health to advance (Weist, Lever, Bradshaw, & Owens, 2014).

Over the past four years, developers of the First Step intervention have been engaged in an iterative development process to create enhancements to the program that extend the range of the intervention. Two manualized enhancements of the First Step intervention were developed through this process. The first, the Tertiary First Step Resource Manual, is described in the methods section (Frey, Walker, et al., 2013c). The second, the First Step Classroom Check-up Resource Manual (Frey, Walker, et al., 2013d) can be implemented flexibly at the secondary and tertiary program levels, as a stand-alone intervention, or as one of several components of a yet-to-be-developed universal program variation within an overarching First Step System of Support.

This manuscript reports an initial empirical study of the First Step program's tertiary-level adaptation for more severely involved students. This adapted program variation differs from the original First Step in that it is designed for tertiary level students and includes (a) a new, more intensive home component (Tertiary homeBase), (b) screening procedures that require behavioral impairment in *both* home and school settings, and (c) modifications to the school component necessary for successful implementation with tertiary-level students.

The purpose of this article is to report the feasibility and potential impact of the Tertiary First Step intervention. Specifically, we examined a number of process variables associated with these program enhancements, such as fidelity of implementation, dosage, and satisfaction. Further, we examined the extent to which participation in the intervention was associated with reductions in parental distress and improvements in parenting efficacy, children's social competency, and academic engaged time. Finally, we examined the associations between our process and outcome variables for the school and home components, respectively.

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