Stakeholder Views on Children’s Mental Health Services

Adriana Rodriguez
Virginia Commonwealth University

Follow this and additional works at: https://scholarscompass.vcu.edu/etd
Part of the Clinical Psychology Commons

Downloaded from https://scholarscompass.vcu.edu/etd/2891

This Thesis is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.
Stakeholder Views on Children’s Mental Health Services

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

by

Adriana Rodríguez
Bachelor of Arts, Psychology, University of California, Berkeley, 2008

Major Director: Michael A. Southam-Gerow, Ph.D.
Associate Professor of Clinical Psychology
Department of Psychology

Virginia Commonwealth University
Richmond, Virginia
October, 2012
Acknowledgment

This work would not have been possible without the generosity of the children, families, and clinic personnel who participated in this research. I would also like to acknowledge the members of this thesis committee, Drs. Mary Katherine O’Connor and Terri Sullivan for their valuable support and guidance in completion of this study. I am particularly grateful to Dr. Michael A. Southam-Gerow for his generosity in providing these data, his mentorship, and his encouragement throughout this process. Finally, I thank my family. There are no words to describe how appreciative I am for their support and constant words of encouragement. I am particularly thankful to my madrecita and hermanas for their strong-willed goal of instilling in me a sense of persistencia in attaining an education while teaching me to remain humilde in the process.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>v</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vi</td>
</tr>
<tr>
<td>Abstract</td>
<td>vii</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Key Definitions</td>
<td>4</td>
</tr>
<tr>
<td>Prevalence and Outcomes of Child Mental health Disorders</td>
<td>7</td>
</tr>
<tr>
<td>Review of EBT Classification for Child and Adolescents</td>
<td>9</td>
</tr>
<tr>
<td>PracticeWise Review of EBTs for Children and Adolescents</td>
<td>15</td>
</tr>
<tr>
<td>Understanding the Science-Practice Gap</td>
<td>20</td>
</tr>
<tr>
<td>Barriers to Dissemination</td>
<td>26</td>
</tr>
<tr>
<td>Models of Dissemination Research</td>
<td>37</td>
</tr>
<tr>
<td>Qualitative Methodological Approach</td>
<td>41</td>
</tr>
<tr>
<td>The Present Study</td>
<td>43</td>
</tr>
<tr>
<td>Method</td>
<td>45</td>
</tr>
<tr>
<td>Overview</td>
<td>45</td>
</tr>
<tr>
<td>Participants</td>
<td>46</td>
</tr>
<tr>
<td>Procedures</td>
<td>47</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>50</td>
</tr>
<tr>
<td>Results</td>
<td>52</td>
</tr>
<tr>
<td>Overview</td>
<td>52</td>
</tr>
<tr>
<td>Theme Frequencies</td>
<td>53</td>
</tr>
<tr>
<td>Testing for Between Group Differences for Specific Themes</td>
<td>57</td>
</tr>
<tr>
<td>Cluster Analyses</td>
<td>60</td>
</tr>
<tr>
<td>Post-Hoc Analyses</td>
<td>62</td>
</tr>
<tr>
<td>Discussion</td>
<td>65</td>
</tr>
<tr>
<td>Study Limitations &amp; Future Directions</td>
<td>73</td>
</tr>
<tr>
<td>Conclusion</td>
<td>75</td>
</tr>
<tr>
<td>List of References</td>
<td>76</td>
</tr>
</tbody>
</table>
## Appendix A: Coding Manual

Appendix A: Coding Manual. 89

## Appendix B: Exemplar Themes

Appendix B: Exemplar Themes. 89

## Vita

Vita. 96
List of Tables

1. Table of Level 1 (Best Support) Treatment Families for Youth Anxiety, Depression, Attention, and Disruptive Problem Areas ................................. 18
2. Table of Level 2 (Good Support or Better) Treatment Families for Youth Anxiety, Depression, Attention, and Disruptive Problem Areas ................................. 19
3. Table of Participant Service Provider, Administrator, and Parent Characteristics.................................................................................................................. 49
4. Table of Frequency and Percentage Data of Themes by Stakeholder Groups......................................................................................................................... 56
5. Table Mann-Whitney results summary table (mean ranks and $p$-values) for 3 comparisons of theoretical groupings.................................................................................. 60
6. Table of Pearson Correlations for Stakeholder Group by Coding Similarity............... 62
7. Table of Mann-Whitney results summary table (mean ranks and $p$-values) for 3 comparisons of post-hoc groupings.......................................................................................... 65
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mental Health System Ecological (MHSE) Model</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Stakeholder Groups Clustered by Coding Similarity</td>
<td>61</td>
</tr>
</tbody>
</table>
Abstract

STAKEHOLDER VIEWS ON CHILDREN’S MENTAL HEALTH SERVICES

By Adriana Rodríguez, B.A.

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

Virginia Commonwealth University, 2012

Major Director: Michael A. Southam-Gerow, Ph.D., Associate Professor of Clinical Psychology

Department of Psychology

Identification of evidence-based treatments (EBTs) has been an important development; however recently, some shortcomings of the approach have been highlighted. These complexities have led to a surge in transportability research in mental health services science with goals of identifying needed strategies to encourage the adoption of innovations. The mental health system ecological (MHSE) model is an approach necessary to assist with closing this gap effectively as it integrates mental health contexts: client-level, provider-level, intervention-specific, service delivery, organizational, and service system characteristics. The aim of this study is to use the MHSE model to examine perspectives of mental health stakeholders on their needs. Data consists of qualitative transcripts from parent, therapist, and administrator interviews/focus groups. Mixed methods were used to develop and analyze codes according to the MHSE model. Results suggested that stakeholder groups mentioned needs relevant to the group of interest and thus have implications for future dissemination efforts.
Stakeholder Views on Children’s Mental Health Services

Given the high prevalence rates of psychopathology in children, as high as 20% (Hoagwood & Olin, 2002), and the high rates of children who do not receive adequate treatments, there have been significant efforts to develop and test psychological treatments. These efforts have led to the development of a multitude of evidence-based treatments (EBTs) for various childhood disorders, including anxiety, depression, and disruptive behavior disorders. For example, cognitive behavioral therapy (CBT) has proven to be effective in various randomized controlled trials (RCTs) for treating anxiety disorders in children (e.g., Kazdin & Weisz, 2003; Bodden et al., 2008). Cognitive behavioral therapy, medication treatments, and family therapies have demonstrated effectiveness in treating depression in youth (e.g., Brent et al., 2008; Campo & Bridge; 2009). Other proven effective treatments include parent management training (PMT) and behavioral classroom interventions for Attention Deficit Hyperactivity Disorder (ADHD; Pelham, Wheeler, Chronis, 1998) and PMT for conduct disorders (Brestan, & Eyberg, 1998). Despite a plethora of EBTs for a variety of childhood disorders, prevalence rates of psychopathology remain high.

Identification of EBTs has been an important development in the field of childhood psychology; however, researchers have highlighted some shortcomings of the approach – primarily that treatments tested in research settings may not perform as well in other settings (Weisz, Weiss, & Donenberg, 1992). For example, critics have suggested that clients in research studies differ from clients treated in other practice settings. This concern has been verified in various studies (e.g., Southam-Gerow, Chorpita, Miller, & Gleacher, 2008; Southam-Gerow, Weisz, & Kendall, 2003) and is highlighted in a recent review of the science of implementation in mental health settings (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). Specifically,
Fixsen and colleagues’ (2005) review found that many of the implementation efforts have not succeeded, despite success in efficacy trials. This is concerning given the vast amount of time and effort funneled into efficacy research and underlying assumption of EBT dissemination to practice settings.

Furthermore, attempts to test EBTs in effectiveness studies have had mixed success with child and adolescent samples (e.g., Clarke, Hornbrook, Lynch, Polen, Gale, & O’Connor, 2002; Southam-Gerow et al., 2010; Weisz et al., 2009). It has been proposed that these mixed findings result from differences in client demographics (e.g., Southam-Gerow et al., 2008). These apparent challenges have led to a surge in transportability research in mental health services science (e.g., Chorpita & Nakamura, 2004), where the goal is to identify the needed strategies to encourage the adoption and effective execution of treatment innovations (Schoenwald & Hoagwood, 2001).

Some have advocated designing transportability research by applying the multi-level ecological model described by Schoenwald and Hoagwood (2001) and Southam-Gerow, Ringeisen, and Sherrill (2006). The model explicitly incorporates the multiple levels of practice contexts: (a) client-level factors (e.g., referral problem/s, family context, referral source, age, gender, or ethnicity), (b) provider-level factors (e.g., specialized training and received clinical supervision, provider type, whether the provider endorses the intervention model, salary level, or anticipated job longevity), (c) intervention-specific characteristics (e.g., the nature of treatment theory, treatment focus, use and comprehensiveness of manualized treatment, and/or complexity of the intervention), (d) service delivery characteristics (e.g., session and duration of sessions, source of funding for services), (e) organizational factors that include structure and hierarchical levels of authority within a setting, policies that could affect the personnel, mission of the setting, or mandates, and lastly (f) service system characteristics (e.g., policies and practices of referral
sources and payers, interagency working relationships, or legal mandates of referral sources and other collaborators) (Southam-Gerow et al., 2006; Schoenwald & Hoagwood, 2001; See Figure 1).

Based on the existing literature on EBTs for childhood disorders and the growing challenges that have been identified in transportability science, the primary objective of this work is to examine EBT adaptation and development by examining the perceptions of clinic mental health stakeholders (clinic administrators, clinic providers, and parents). This multi-perspective approach is in line with the Mental Health Ecological Model and aims to use a partnership research approach. Although there are a variety of ways to approach the challenge of adapting EBTs, the current study focuses on the use of a partnership research approach. Specifically, the participatory action research (PAR; Jason, Keys, Suarez-Balcazar, Taylor, & Davis, 2004) aims to empower individuals and facilitate change in political, social, and organizational levels by integrating them into the research process. The PAR approach may be
particularly beneficial in ensuring that research is responsive to needs and values of a given community at an organizational or systemic level. Thus, PAR may be a useful approach for dissemination efforts as it lends itself to both understanding needs of a community and further making the adequate adaptations of EBTs relevant to a given community. Further, the present study is part of a larger treatment adaptation project taking place in a large, diverse county in Central Virginia. Given the paucity of research in this area, a qualitative-exploratory approach was chosen as a means to develop hypotheses for future research. Focus groups were used to capture the various stakeholder perspectives and further engage stakeholders.

Prior to describing the proposed study, the literature on dissemination research relating to the development and implementation of EBTs in community settings is reviewed. Specifically, a few key definitions relevant to the review are presented. Second, current prevalence rates and outcomes of youth mental health disorders (internalizing and externalizing disorders) are described to further illustrate the need for research that better addresses the current mental health treatment needs of our youth. Third, a brief and illustrative review of the current evidence base for childhood treatments, focusing on treatments for anxiety, depression, conduct, and attention related disorders is provided (APA Task Force, 1995; Chorpita & Daleiden, 2009). In the fourth section, the science-practice gap is discussed, with particular attention to several recent effectiveness studies. Fifth, a description of the potential barriers to successful dissemination and implementation of the many evidence-based programs is provided. Finally, several approaches proposed to address the barriers, including the partnership approach to engaging mental health stakeholders are reviewed.

**Key Definitions**

Prefatory to the review, it is necessary to clarify definitions of several terms that are used throughout, most importantly *efficacy, effectiveness, and dissemination research*. Although there
is some controversy concerning the definitions for the terms (cf. Barlow, 1996; Donenberg, Lyons, & Howard, 1999; Nathan, Stuart, & Dolan, 2000), here I clarify the definitions I applied throughout this work.

Although different standards for evidence based treatments have been developed, most include the need for evidence from randomized controlled trials and other clinical studies. These clinical studies have mainly been divided into two types: efficacy studies or effectiveness studies. According to criteria provided by the APA Task Force on Psychological Intervention (1995), the criteria that constitutes an efficacious treatment consists of two primary characteristics. First, efficacious treatments are specific and target a particular psychopathological problem (e.g., CBT for youth anxiety). In addition, these treatments focus on internal validity, that is, the focus is placed on whether a treatment is well-validated in a controlled research setting (Huppert, Fabbro, & Barlow, 2006). To this extent, treatment efficacy is grounded in basic controlled research in which the benefits of a treatment are due to the treatment and not to external factors (e.g., passage of time or difference in patient characteristics). Efficacy studies often use randomized control trial (RCT) methodology to compare outcomes of the new treatment and a control group (Barlow, 1996). An RCT approach maximizes internal validity, making the design ideal for the goal of an efficacy study to demonstrate the potency of a specific treatment.

Chambless and Hollon (1998) describe effectiveness research as research that tests the clinical utility or effectiveness of a treatment by assessing its value in a clinical practice context, that is, “whether the treatment can be shown to work in actual clinical practice” (p. 14). Clinical utility entails not only generalizability to a clinical setting (and thus high external validity), but also an evaluation of feasibility and cost-effectiveness of the intervention. Effectiveness studies, therefore, tend to (a) include relatively heterogeneous patient populations, (b) have one treatment performed therapists employ in the setting (versus having graduate student therapists) and, (c)
rely on the regular referral procedures from the specific clinic setting (Southam-Gerow, Marder, & Austin, 2008). Chambless and Hollon (1998) also suggest that there is not a clear distinction between efficacy and effectiveness, rather there is a distinction between internal and external validity.

Dissemination research focuses on the directed and planned spread of a treatment and the strategies of implementation to achieve wide-spread use (Southam-Gerow, Marder & Austin, 2008). The term dissemination is at times used synonymously with the terms diffusion and implementation to refer to the spread of an innovation, such as a treatment program; however, many argue that these terms are distinct concepts (Schoenwald & Hoagwood, 2001; Chambers, Ringeisen, & Hickman, 2005; Southam-Gerow et al., 2008). Southam-Gerow and colleagues have defined dissemination, diffusion, and implementation as distinct but related constructs. Diffusion refers to the unplanned or spontaneous process by which an innovation spreads. Dissemination is a targeted spread of a well-supported treatment and is a clear representation of how a treatment is marketed after successful implementation techniques have been identified. Implementation as defined by Fixsen, Naom, Blasé, Friedman, & Wallace (2005) is a specific, detailed set of “…activities designed to put into practice an activity or program of known dimensions” (p.5).

Now that specific transportability science terminology has been reviewed, the following section will describe the main reason for increased interest over the last few decades in efficacy, effectiveness, and dissemination research. Specifically, the following section focuses on mental health disorder prevalence rates and outcomes among youth for internalizing and externalizing problem areas.
Prevalence and Outcomes of Child Mental Health Disorders

The prevalence of mental health in children and adolescents in the United States has remained at a concerning high. Data from the National Health Interview Survey of 2001 through 2004 and data from the Center for Disease Control and Prevention (CDC) of 2002 indicated that 5.5 percent of children in the United States ages 4 to 17 years have a definitive or severe emotional or behavioral problem (SAMHSA, 2004). Additionally, the U.S. Public Health Services (USPHS; 2000) data suggest that up to 20 percent of children and adolescents suffer from an actual mental health disorder. The prevalence of comorbid disorders in children is also reported at concerning elevated rates; for instance, some studies report that one in three youth will have one or more psychiatric disorders by the age of 16 (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003).

Additionally, childhood and adolescent disorders have been linked to adult disorders and can reflect as either homotypic disorders (i.e., disorder that predicts itself over time) or heterotypic disorders (i.e., different disorders predicting other disorders over time) (see Copeland, Shanahan, Costello, & Angold, 2009; Kim-Cohen, Moffitt, Harrington, Milne, & Poulton, 2003). For example, Copeland and colleagues (2009) found that anxiety and depression tend to cross-predict from childhood/adolescence to adulthood such that generalized anxiety disorder (GAD) was found to predict depression in adulthood and adolescent depression predicted agoraphobia without panic disorder in adulthood. Depression in childhood has also been linked to increased risk for subsequent depression in adulthood, suicide, substance use, and impairment in social and academic settings. Specifically, research suggests that 45% of adolescents with a history of depression developed another depressive episode between the ages of 19 and 24 (Lewinsohn et al., 2003; Shaffer, Fisher, Dulcan, et al., 1996).
A large proportion of children suffering from mental health problems fall under the broad category of internalizing problems (e.g., anxiety and depression), difficulties estimated to affect 11.1% of children (Carter, Wagmiller, Gray, McCarthy, Horwitz et al., 2010). Childhood anxiety disorder prevalence rates range from 10 to 21% (Verdeli, Mufson, Lee, & Keith 2006). Depression also affects a large proportion of children and adolescents in the United States; ranging from 8-10% in adolescents and two percent in younger children (Verdeli, et al., 2006). The National Survey on Drug Use and health (NSDUH) averaged data from 2005 and 2007 and estimated that youth ages 12 to 17 have experienced a major depressive episode (MDE) in the past year; with higher risk of a MDE for female adolescents than their male counterparts (SAMHSA, 2010).

Likewise, externalizing disorders (e.g., conduct, oppositional disorders) affect 13.8% of children (Carter et al., 2010) and have been associated with significant impairment in adulthood. For example, adolescent oppositional defiant disorder (ODD) has been linked to adult GAD, panic disorder without agoraphobia (in males only), depression, and anti-social personality disorder (ASPD) (Copeland et al., 2009). There is also evidence that childhood conduct problems predict risk taking and are linked to later adult conduct problems (Herrenkohl, Kosterman, Mason, Hawkins, McCarty, et al., 2010). The prognosis for children diagnosed with a disruptive behavior disorder (DBD) includes a heightened risk for juvenile delinquency, antisocial behavior, substance abuse, and school dropout (Hudziak, Copeland, Stanger, & Wadsworth, 2004; Hunter, Figuerdo, Malamuth, & Becker, 2003) with additional strain placed on both family and broader educational, welfare, criminal justice systems (Essau, 2003). Research further suggests that there is a hierarchical relationship with ODD and CD, such that ODD is a precursor to later CD in youth (Bradley & Mandell, 2005). Finally, attention deficit/hyperactivity disorder (ADHD) is cited as one of the most frequent reasons for referral.
and is prevalent in as many as 5 to 7% of children (Wilens, Biederman, Brown, Monuteaux, Prince, & Spencer, 2002).

According to recent data collected by the World Health Organization, there will be over a 50% rise internationally in childhood disorders by 2020 (USPHS, 2000). This projected rise in childhood mental health disorders is concerning and highlights the urgency for action in various domains of child mental health. As indicated at the Surgeon General’s Conference on Children’s Mental Health: A National Agenda, one set of prominent goals in addressing child mental health is in developing, disseminating, and implementing scientifically-based prevention and treatment services for children and adolescents (USPHS, 2000). As a result of the high prevalence rates of child mental health problems and the urgency of policy makers to make child mental health a priority, many psychological treatments have been developed and tested for children and adolescents suffering from a variety of problem areas.

The following section will begin with a description of a method for categorizing evidence based treatments according to two different sets of criteria (APA Task Force, 1995; Chorpita & Daleiden, 2009). Following the description of these criteria, I will briefly summarize the literature for evidence based treatments that are now available for many youth problem areas, including anxiety, depression, conduct problems, and attention deficit hyperactivity disorder based on criteria established by the distillation and matching model (DMM) approach by Chorpita, Daleiden, and Weisz (2005).

Review of EBT Classification for Children and Adolescents

American Psychological Association Task Force EBT Guidelines

The American Psychological Association Task Force (APA, 1995; Chambless et al., 1996) proposed a set of criteria for evidence-based therapies (or what they termed, “empirically validated treatments”) over 15 years ago, which have been updated and clarified in the
subsequent years. The Task Force was one of the first to fully articulate, define, and categorize evidence based treatments. By the Chambless and colleagues criteria, a *well-established treatment* consisted of the following:

1. Have at least two good between group design experiments demonstrating efficacy in one or more of the following ways:
   A) treatment was superior to pill or psychological placebo or to another treatment or
   B) treatment was equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group) or
2. Have a large series of single case design experiments (n≥9) demonstrating efficacy and must have:
   A) experiments (single case design) that use good experimental design and
   B) must compare treatment to another treatment as in the first criteria.

Additionally, experiments should include a treatment manual, client characteristics should be clearly specified, and the treatment effects should be demonstrated by at least two different investigators or teams.

Criteria for a *probably efficacious treatment* must meet one of the following criteria:

1. Treatment must be more effective than a waiting-list control condition, or
2. One or more experiments must meet the *well-established treatment* criteria; however, must not meet the requirement of two different researchers or teams, or
3. A small series of single case design experiments (n≥3) must otherwise meet the criteria for a *well-established treatment*; however, must not meet the requirement of two different researchers or teams.

These criteria have been useful guidelines and have since been updated by Silverman and Hinshaw (2008). The significant treatment classification modifications pertained to the addition
of two categories: *possibly efficacious treatment* and *experimental treatments*. Possibly efficacious treatments must have at least one good study showing the treatment to be efficacious in the absence of conflicting evidence. Experimental treatments consist of treatments that have not yet been tested in trials meeting task force criteria for methodology. Additional definition specification was aggregated to the already developed well-validated treatments category including: (a) conducted with a population, treated for specified problems, for whom inclusion criteria have been delineated in a reliable, valid manner, (b) reliable and valid outcome assessment measures, at minimum tapping the problems targeted for change were used, and (c) appropriate data analyses.

**Distillation and Matching Model for Categorizing Psychological Treatments**

Chorpita and Daleiden (2009) have approached treatment categorization in a complementary yet distinct way from the previously described. They suggest that although the traditional way of approaching EBT categorization (e.g., Task Force, 1995; Silverman & Hinshaw, 2008) has been a step forward, it also inadvertently put the focus on the specific evidence-based treatment manual (e.g., Coping Cat; Kendall, Kane, Howard, & Siqueland, 1990) itself, rather than on the treatment family (i.e., cognitive-behavioral therapy for anxiety) or the specific strategy components (e.g., exposure). In other words, the focus has been on whether a specific treatment protocol itself was effective and not on whether the components of the protocol or treatment family from which the protocol originates are effective. Chorpita and Daleiden argue that such a focus may not be beneficial to our understanding of what really is working. Instead, they suggest reframing our view of EBTs to an approach that clearly identifies which theoretical family or assembly of component strategies are working and whether particular component practices are associated with specific client characteristics such as age or gender. To
accomplish this goal, Chorpita, Daleiden, and Weisz (2005) proposed a Distillation and Matching Model (DMM).

The model promotes an understanding of the relations between the context, or matching variables, and treatment components (i.e., the distilled techniques). Unlike other approaches to classification, the DMM considers the real-world complexity of identifying and selecting interventions by using the evidence base as a guide. The first step of the model addresses the method of distillation in which an intervention is not conceptualized as a “whole” (e.g., parent management training) but rather in terms of “individual” strategies, techniques, or components (e.g., praise, tangible rewards, time-out) that can be empirically regrouped into effective interventions. The second step is the method of matching, which entails summarizing client, setting, or other pertinent factors relevant to selecting an appropriate intervention (e.g., gender, age). One complement of the DMM to the traditional classification approach (i.e., Task Force) is the defining of a level of analysis (i.e., theoretical family or assembly of strategies), which allows for empirical inferences to be made about treatment content. In addition, this approach allows for higher level interaction context analysis, that is, not only understanding what may work to treat depression or what may work to treat depressed adolescents, but also what may work for depressed 12-year-old girls of Hispanic background.

Chorpita and Daleiden (2009) aimed to evaluate the DMM through these various facets by applying the DMM to 332 RCTs, spanning a period of 41 years of research, using the PracticeWise Clinical Coding System (PracticeWise, 2005). This system was used for nonpharmacological treatments targeting specific child problems and studies were coded and double-coded specifically for a target problem area (anxiety, attention deficit and hyperactivity, autistic spectrum, depression, disruptive behavior, substance use, and traumatic stress), age, gender, and ethnicity (i.e., context variables). Winning treatment groups were identified and
entered into the data analysis set where a winning treatment group was defined as an active, nonpharmacological treatment that proved more effective than other groups (i.e., psychosocial treatment groups, medication, a combined treatment, wait-list, no treatment, or other control condition). This study is the first to summarize successful components of treatments tested in RCTs for children, and demonstrates a new way of organizing and mapping of the literature. The results of the distillation analysis, through a data reduction approach using intraclass correlation coefficients (ICCs), suggest that successful treatments cluster and correspond primarily to child problem areas. There were also special case findings demonstrating that when specific groups were represented in the literature, the treatments were characterized by different practice elements. For example, training parents to praise was more common in anxiety treatment studies with Asian-American children (40%) than in the overall sample of children (7%). These results have implications for research and clinical work. For example, researchers wanting to modify and test treatments can do so systemically by considering the common practices for a given problem area and test new combinations (e.g., testing an EBT in full vs. testing component practice elements). In addition, the results highlight the fact that perhaps we have a limited amount of research in specific areas of special case findings and need more research to address these gaps.

**PracticeWise Evidence-Based Services (PWEBS) Database Levels of Support**

From the results of the distillation and matching study, Chorpita and Daleiden developed an internet-based, searchable database summarizing all child and adolescent RCT studies. The database allows the user to enter specific characteristic information about the client (problem type, age, grade, gender, and ethnicity) and then receive a summary of the treatment programs and practices found to be effective in RCT studies (PracticeWise, 2005). This PracticeWise
Evidence-Based Services (PWEBS) Database, specifically lends itself to matching practice elements to specific contextual parameters of a given client.

This database is organized according to five levels of support for a given common practice. Criteria for the first two levels are similar those established by the original Task Force for a well-established and probably efficacious treatments. A level one treatment is considered *Best Support* and entails two or more studies showing that a treatment was either (a) better than another treatment or placebo or (b) equal to an established treatment (with ≥30 per group). Additionally, a treatment manual is needed, study sample characteristics must be clearly specified, and multiple investigator teams must have replicated the results. A level two or *Good Support* treatment label is provided when two or more studies indicate that either (a) a treatment was better than waitlist or no treatment or (b) one study consisted of manuals and treatment was better than another treatment or placebo or equal to an established treatment (with n≥30). A level three or *Moderate Support* treatment label is provided when one study demonstrates that (a) a treatment is better than another treatment or placebo or (b) is equal to an established treatment (with n≥30). Level four or *Minimal Support* is provided when one study shows that a treatment is better than a waitlist or no treatment control group. Lastly, a level five or *No Support* label is provided when a treatment is tested in at least one study, but failed to meet criteria for levels one through four (PracticeWise, 2005).

In the following section, I provide a brief review of the current state of youth evidence-based treatments using the classification system of the PracticeWise Database. However, a few definitions are needed. At the broadest level of abstraction is the *treatment family*, which is comprised of treatment protocols that all share the same basic theoretical approach or orientation to treating a specified problem area, such as cognitive behavioral therapy (CBT) for anxiety or multisystemic therapy (MST) for disruptive behavioral problems. A *treatment protocol* is
defined as the “description of the set of treatment operations in which members of a particular study group participated” (for example, the set of participants from the treatment or control groups of an RCT; Chorpita & Daleiden, 2009); a treatment protocol is often, though not always, contained in a treatment manual. For example, Adolescent Coping with Depression (Clarke, Rohde, Lewinsohn, Hops, & Seeley, 1999) would be one treatment protocol. In addition, a practice element is defined as an individual “clinical technique or strategy (e.g., “time out,” “relaxation”) used as part of a larger intervention plan (e.g., a manualized treatment program for youth depression)” (Chorpita, Daleiden, & Weisz, 2005, p. 11).

This review of youth EBTs is not meant to be exhaustive, but rather an illustration of the number and type of treatments that have demonstrated utility for a variety of youth disorders and problem areas. Specifically, I will detail treatments that meet criteria for levels one (i.e., best support) and two (i.e., good or better support) for anxiety, depression, attention, and disruptive behavior problem areas.

**PracticeWise Review of EBTs for Children and Adolescents**

**EBTs for Internalizing Problem Areas**

Internalizing disorders are conditions whose central feature is disordered mood or emotion (Kovacs & Devlin, 1998). This term is widely used in the field of child psychopathology to signify the various mood (e.g., major depressive disorder) and anxiety disorders (e.g., generalized anxiety disorder). The PWEBS database includes these disorders under the problem type categories of anxiety and depression, respectively.

**Anxiety.** Treatments families meeting criteria for Level one (Best) support for anxiety were: (a) Cognitive-Behavioral Therapy (CBT), (b) Exposure, (c) Modeling, (d) CBT with parent involvement, (e) Education, and (f) CBT with medication (see Table 1). The treatment family meeting criteria for Level two (Good or Better) support for youth anxiety was (a) CBT,
(b) Exposure, (c) Modeling, (d) CBT with parents, (e) Education, (f) CBT with medication, and (g) Relaxation (see Table 2).

**Mood.** Treatment families meeting criteria for Level one (Best) support for mood were: (a) CBT, (b) CBT and medication, and (c) CBT with parents, and 4) Family Therapy (see Table 1). Level two (Good or Better) support for depression included: (a) CBT, (b) CBT with medication, (c) CBT with parents, (d) Interpersonal Therapy, (e) Expressive Writing/Journaling/Diary, (f) Family Therapy, (g) Relaxation, and (h) Client-Centered Therapy (see Table 2).

**EBTs for Externalizing Problem Areas**

Childhood externalizing disorders include attention deficit/hyperactivity disorder (ADHD), conduct disorder (CD), and oppositional defiant disorder (ODD), and are primarily characterized by dysregulated behavior (Kovacs & Devlin, 1998). PWEBS uses the categories of attention problems and disruptive behavior.

**Attention.** Treatment families meeting criteria for Level one (Best) support for attention problems were: (a) Self Verbalization and (b) Behavior Therapy and Medication (see Table 1). Treatment families meeting criteria for Level two (Good or Better) support for attention problems were: (a) Parent Management Training, (b) Behavior Therapy and medication, (c) Biofeedback, (d) Physical Exercise, (e) Contingency Management, (f) Parent Management Training and Teacher Psychoeducation, (g) Social Skills and Medication, (h) Education, (i) Parent Management and Problem Solving, (j) Relaxation and Physical Exercise, and (k) Working Memory Training.

**Disruptive behavior.** Treatment families meeting criteria for Level one (Best) support for disruptive behavior were: (a) Parent Management, (b) Multisystemic Therapy, (c) Anger Control, (d) Social Skills, (e) CBT, (f) Parent Management Training and Problem Solving, and
(g) Assertiveness Training. Treatment families meeting Level two (Good or Better) support for disruptive behavior were: (a) Parent Management Training, (b) Multisystemic Therapy, (c) Anger Control, (d) Problem Solving, (e) Social Skills, (f) CBT, (g) Communication Skills, (h) Contingency Management, (i) Parent Management Training and Problem Solving, (j) Assertiveness Training, (k) Parent Management Training and Classroom Contingency Management, (l) Relaxation, (m) Therapeutic Foster Care, (n) Functional Family Therapy, (o) Rational Emotive Therapy, and (p) Transactional Analysis (see Table 2).

In sum, it is evident that there are many treatment approaches that are well validated at various levels (i.e., with best and good support) for youth internalizing and externalizing problem areas (see Tables 1 and 2). For a more extensive review of EBTs, readers should refer to the PracticeWise Evidence-Based System Database, to the Evidence-Based Psychotherapies for Children and Adolescents (Kazdin & Weisz, 2003), or to the 2008 special issue of JCCAP (Silverman & Hinshaw, 2008). In the following section, I will describe the practice-science gap and review efforts to address the gap.
Table 1

**Level 1 (Best Support) Treatment Families for Youth Anxiety, Depression, Attention, and Disruptive Problem Areas**

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Depression</th>
<th>Attention</th>
<th>Disruptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBT (49%)</td>
<td>CBT (68%)</td>
<td>Self-verbalization (57%)</td>
<td>Parent management training (53%)</td>
</tr>
<tr>
<td>Exposure (31%)</td>
<td>CBT and medication (12%)</td>
<td>Behavior Therapy and medication (43%)</td>
<td>Multisystemic Therapy (14%)</td>
</tr>
<tr>
<td>Modeling (8%)</td>
<td>CBT with parents (12%)</td>
<td>---</td>
<td>Anger Control (9%)</td>
</tr>
<tr>
<td>CBT with parents (6%)</td>
<td>Family Therapy (8%)</td>
<td>---</td>
<td>Social Skills (9%)</td>
</tr>
<tr>
<td>Education (4%)</td>
<td>---</td>
<td>---</td>
<td>CBT (6%)</td>
</tr>
<tr>
<td>CBT and medication (2%)</td>
<td>---</td>
<td>---</td>
<td>Parent Management Training and Problem Solving (5%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Assertiveness Training (4%)</td>
</tr>
</tbody>
</table>

Note. Percentages in parentheses represent frequency of programs in the treatment family among those families with level 1 support.
Table 2

Table of Level 2 (Good Support or Better) Treatment Families for Youth Anxiety, Depression, Attention, and Disruptive Problem Areas

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Depression</th>
<th>Attention</th>
<th>Disruptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBT (43%)</td>
<td>CBT (52%)</td>
<td>Parent management training (21%)</td>
<td>Parent Management Training (42%)</td>
</tr>
<tr>
<td>Exposure (32%)</td>
<td>CBT + medication (9%)</td>
<td>Self-Verbalization (14%)</td>
<td>Multisystemic Therapy (10%)</td>
</tr>
<tr>
<td>Modeling (9%)</td>
<td>CBT with parents (9%)</td>
<td>Behavior Therapy + medication (10%)</td>
<td>Anger Control (7%)</td>
</tr>
<tr>
<td>CBT with parents (5%)</td>
<td>Interpersonal Therapy (9%)</td>
<td>Biofeedback (10%)</td>
<td>Problem Solving (6%)</td>
</tr>
<tr>
<td>Education (3%)</td>
<td>Expressive Writing/Journaling/Diary (6%)</td>
<td>Physical Exercise (10%)</td>
<td>Social Skills (6%)</td>
</tr>
<tr>
<td>CBT + medication (2%)</td>
<td>Family Therapy (6%)</td>
<td>Contingency Management (7%)</td>
<td>CBT (5%)</td>
</tr>
<tr>
<td>Relaxation (2%)</td>
<td>Relaxation (6%)</td>
<td>Parent Management Training and Teacher Psychoeducation (7%)</td>
<td>Communication Skills (5%)</td>
</tr>
<tr>
<td>---</td>
<td>Client-Centered Therapy (3%)</td>
<td>Social Skills and Medication (7%)</td>
<td>Contingency Management (5%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>Education (3%)</td>
<td>Parent Management Training and Problem Solving (4%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>Parent Management Training and Problem Solving (3%)</td>
<td>Assertiveness Training (3%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>Relaxation and Physical Exercise (3%)</td>
<td>Parent Management Training and Classroom Contingency Management (2%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>Working Memory Training (3%)</td>
<td>Relaxation (2%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Therapeutic Foster Care (2%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Functional Family Therapy (1%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Rational Emotive Therapy (1%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Transactional Analysis (1%)</td>
</tr>
</tbody>
</table>

Note. Percentages in parentheses represent frequency of programs in the treatment family among those families with level 2 support.
Understanding the Science-Practice Gap

Despite the complexity of child psychopathology, we have seen great advances over the past 30 years in child mental health research. Advances are seen in the stringent methodological quality (e.g., measuring treatment fidelity, assessing clinical significance) and sheer number of controlled studies that have led to the development and identification of a variety of EBTs. For example, treatment fidelity research has addressed methodological strategies used to monitor and enhance reliability and validity of behavioral interventions (e.g., Sanetti & Kratochwill, 2009). This has contributed to the continued development of innovative, credible, and clinically applicable intervention programs (Bellg et al., 2004). Further, as demonstrated in the previous section, great strides have been made with developing guidelines and definitions for evidence-based treatments (e.g., APA Task Force, 1995; Chambless et al., 1998; Chorpita & Daleiden, 2009). Research progress has led to changes in practice policy at the national level (APA Task Force, 1995); however, policy changes alone are not likely to change the delivery of EBTs in real-world settings. This growing concern has led to an increase in dissemination and implementation science research. The following section will serve to elucidate this debate. First, I will provide a description of the science-practice gap, followed by a discussion of the ways the science-practice gap has led to a growth in dissemination research. Finally, I will review the dissemination research for anxiety, depression, attention, and behavioral problem areas.

Despite published research on empirically supported treatments (ESTs), changes in treatment delivery in community settings have not paralleled this increase in science knowledge, an observation referred to as the science-practice gap. Because of the gap, decades of treatment science have not resulted in increased utilization by community mental health providers as hoped (Norquist, Lebowitz, & Hyman, 1999). For example, a study by Goisman, Warshaw, and Keller
(1999) examined whether changes in treatment recommendations increased the utilization of evidence-based practices for anxiety disorders. Results indicated that there was not an increase in utilization of behavioral and cognitive behavioral treatments over a five-year span despite the increasing awareness of the effectiveness of cognitive behavioral therapy practices for anxiety.

Early work used benchmarking methods, a low-cost method for assessing outcomes in dissemination research, to determine the applicability of EBTs in novel settings (Weersing & Weisz, 2002). Benchmarking methods generally entail the comparison of treatment outcome data from an EST as delivered in a community setting to treatment outcome point-by-point data from an EST as delivered in one or more RCTs. If results indicate that the EST in the community setting is of similar magnitude to the RCT results, the EST is considered to have good support of generalizability to the community context (Wade, Treat, & Stuart, 1998). In this way, Weersing and Weisz (2002) assessed the effectiveness of community psychotherapy relative to EBTs in clinical trials using benchmarking methods. Benchmarking methods have also been utilized to assess adolescent depression CBT in community settings (Shirk, Kaplinski, & Gudmundsen, 2009) and with CBT for youth OCD (Farrell, Schulup, & Boshcen, 2010). Other treatments have also successfully been disseminated to community settings though benchmarking strategies such as Multisystemic Therapy for juvenile offenders in a community-based context (Henggeler et al., 1997; Curtis, Ronan, Heiblum, & Crellin, 2009).

Benchmarking studies have increased optimism for the potency of EBTs in diverse settings. Only a few RCTs have been conducted outside of university research clinics for some childhood disorders and those that have provide mixed findings. In the next section, I will review the literature on measuring effectiveness of EBTs in diverse settings, beginning with studies reporting favorable findings.
Favorable effectiveness outcomes.

In a small pilot study Baer and Garland (2005) assessed the efficacy of a cognitive-behavioral group therapy program for adolescents (ages 13-18) diagnosed with social phobia in a community outpatient psychiatric setting. Adolescents were randomly assigned to one of two groups, treatment ($n = 6$) or waitlist ($n = 6$). The behavioral intervention consisted of 12-weekly group sessions primarily focused on education, social skills training, and exposures. Results indicated that adolescents in the treatment condition demonstrated greater improvement in social anxiety symptoms than the waitlist group, suggesting that group CBT for adolescents with social phobia is an effective treatment. In addition, school-based anxiety treatments have also demonstrated promise.

A study with a small sample of African-American adolescents ($n = 12$) assessed the feasibility and effectiveness of a manualized group CBT in a school setting. Adolescents diagnosed with anxiety disorders were randomly assigned to either a CBT group condition (exposure, relaxation, social skills, and cognitive restructuring) or a group attention-support control condition (talk group therapy and peer support). Results suggest that the adolescents in the CBT condition had a better outcome (75% no longer met criteria for primary anxiety disorder) than those in the attention-support condition (20% no longer met criteria), suggesting its effectiveness for a school based, African-American, low-income adolescent population (Ginsburg & Drake, 2002).

Larger sample sizes have also revealed positive findings for the effectiveness of treatments. For example, Muris, Meesters, and van Melick (2002) examined the efficacy of group CBT in treating children with anxiety disorders in a school setting. The conditions included CBT, emotional disclosure (ED), and a no-treatment condition and consisted of 30
children ages 9 to 12 years. Findings revealed that children in the CBT condition had greater anxiety disorder symptom reductions than children in the other conditions.

Similar findings have been seen in the treatment of adolescent depression. For instance, Mufson and colleagues assessed the effectiveness of interpersonal psychotherapy for depressed adolescents (IPT-A) in a school-based health clinic with a sample of 63 adolescents. Adolescents were randomly assigned to either IPT-A ($n = 34$) or to the treatment as usual (TAU) condition ($n = 29$). Results revealed that adolescents in the IPT-A condition fared better in reducing depression symptoms and improving overall functioning than the TAU group (Mufson, Dorta, Wickramaratne, Nomura, Olfson, & Weissman, 2004). Similar findings have been found with IPT-A in clinic settings (e.g., Mufson, Weissman, Moreau, & Garfinkel, 1999).

The literature on the effectiveness of multisystemic therapy (MST) effectiveness for youth has also been promising. Letourneau and colleagues (2009) evaluated the preliminary effectiveness of MST in a sample of 127 youth (11 to 17 years of age) referred by the county state’s attorney after being charged with a sexual offense. Youth were randomized to the MST condition or to the treatment as usual for juvenile sex offenders (TAU-JSO) condition. The results demonstrated that MST was more effective than TAU-JSO in decreasing deviant sexual interest/risk behaviors, delinquent and substance use behaviors, externalizing problems, and costly out-of-home placements over four time points (6, 12, 18, and 24 months). MST has also demonstrated effectiveness for treating maltreated youth and their families when compared to usual outpatient treatment (Swenson, Schaeffer, Henggeler, & Faldowski, & Mayhew, 2010) as well as for treating delinquent inner-city adolescents (Henggeler, Rodick, Bourdin, Hanson, Watson, & Urey, 1986).
Less favorable effectiveness outcomes.

Although the proceeding studies support the promise of EBTs tested in various community settings, other studies have been less supportive. For example, Barrington, Prior, Richardson, and Allen (2005) aimed to assess the effectiveness of CBT for child anxiety in a community mental health service (CMHS) setting in which CMHS was compared to treatment as usual (TAU). Children in both conditions demonstrated improvement in anxiety symptoms over time; however, no significant differences were found between the two conditions.

In a multi-site community-based treatment effectiveness study, Youth Anxiety and Depression Study (YADS), Weisz and colleagues assessed the effectiveness of CBT in two separate studies for youth who met criteria for depression and youth who met criteria for anxiety. Weisz and colleagues (2009) assessed the effectiveness of CBT for depressed youth by comparing it to a usual care condition (UC) in a sample of 57 youth ages 8 to 15. Although posttreatment results suggested that 75% of youth no longer met criteria for a depressive disorder, there was no significant difference between the CBT and UC groups in diagnosis-symptoms for depression (Weisz et al., 2009). In a second study, Southam-Gerow and colleagues (2010) assessed the effectiveness of CBT for youth who met criteria for anxiety in a sample of 48 youth. This was the first fully randomized effectiveness trial (with both clients and therapist randomized to treatment condition) comparing an empirically supported EBT (Coping Cat; Kendall, Kane, Howard, & Siqueland, 1990) with the usual care provided in publicly funded clinics. The results indicated that the CBT condition did not produce better clinical outcomes than the UC condition youths referred to community clinics for anxiety (Southam-Gerow, Weisz, Chu, McLeod, Gordis, & Connor-Smith, 2010).

There have also been other less favorable results related to depression treatments. For example, Clarke and colleagues (2002) compared usual care (UC) for youth depression in a
Kaiser Permanente health maintenance organization (HMO) to a UC plus group CBT condition (using a manualized CBT protocol for adolescents) in a sample of 88 youth who met criteria for major depression and/or dysthymia. Results suggested that there were no significant advantages to the group CBT program over the usual HMO care (Clarke et al., 2002). Likewise, Kerfoot and colleagues (2004) assessed the effectiveness of CBT for depressed youth when social workers were trained versus not trained in CBT. Results also suggested that regardless of training, children in the social worker trained condition did not differ in depression levels at post treatment (Kerfoot, Harrington, Harrington, Rogers, & Verduyn, 2004).

Furthermore, a study assessed the effectiveness of an eight-week (one hour a week) parenting training (PT) in a primary care setting with 89 three-year-old children with preschool AD/HD. Children were randomly assigned to one of two conditions: PT ($n = 59$) or waitlist control ($n = 30$). PT consisted of hourly sessions with a health care specialist in the family home setting. Even though PT is an effective intervention for preschool AD/HD, results demonstrated that PT did not reduce AD/HD symptoms and mothers rated themselves as more distressed and less effective and satisfied than pre-ratings (Sonuga-Barke, Thompson, Daley, & Laver-Bradbury, 2004).

Additionally, a study aimed to assess the long-term effects of the parent focused intervention program, Incredible Years (Brestan & Eyberg, 1998), a well-established treatment, for children with significant conduct behavioral problems (Drugli & Larsson, 2006). The study consisted of three treatment conditions (Parent training only (PT), Parent training + child training (PT+CT), and waitlist control (WC)) and found that in general, there were significant decreases in aggression levels after treatment for children in the PT+CT condition as compared to the PT or WLC. However, a one-year follow up indicated that children in the PT+CT condition did not
fare well at maintaining aggression levels low when compared to the PT and WLC conditions, which maintained a slower increase.

In sum, there is evidence to suggest that (a) although many EBTs have been identified, there has not been a parallel increase in utilization and (b) outcome studies have yielded mixed findings when EBTs are tested in diverse community settings. The lack of clear success of EBTs when applied in community settings has led many to explore and explain why EBTs are not performing as well as expected. The following section will describe posited client, therapist, intervention, organizational, and service-level factors related to the lack of clear success of EBTs when applied in community settings.

**Barriers to Dissemination**

Many have posited explanations for the discrepancy in what treatments are known to be effective and what is practiced in real-world practice settings. The data highlight two very important problems that the field faces. First, there seems to be very little “penetration” of evidence based treatments into practice settings (Higa & Chorpita, 2008). Second, it is unclear how generalizable the results are from studies indicating substantial evidence for specific treatments. Scientists and policymakers have proposed a variety of hypotheses explaining those two problems (e.g., Schoenwald & Hoagwood, 2001; Hoagwood, Burns, Kiser, Ringeisen, & Schoenwald, 2001; Barlow, Levitt, & Bufka, 1999; Higa & Chorpita, 2008). A common thread among these hypotheses is that dissemination research involves a multidimensional ecology and any of the dimensions may pose challenges to dissemination efforts. Those dimensions most commonly identified include: (a) client/family, (b) therapist, (c) intervention, (d) agency, and (e) system. A description of the research examining each of the five dimensions follows.
Client/Family Factors

One of the most commonly cited reasons for the sustained science-practice gap is that EBTs are not tested with clients that are similar enough to clients found in the community practice settings (e.g., Kazdin, 2000). For example, in attempts to understand whether differences exist between samples used in community and well controlled studies, Southam-Gerow, Weisz, and Kendall (2003) aimed to assess whether differences existed in children who were treated for anxiety disorders in university-based clinics (RCs) and children treated in community-based service clinics (SCs). The results indicated that although children in both contexts displayed similar internalizing symptoms and diagnoses, children who were treated in SCs tended to have more comorbid external disorders, were from lower income families, and were more commonly from single parent families compared to those from a RC context.

Southam-Gerow and colleagues extended exploration of potential differences in samples of children with anxiety disorders based on referral source differences (private referral or public referral). Differences in symptoms/diagnoses, functioning, and environments (e.g., family income, family composition, parental stress, child stressors) were assessed. They found no significant differences in terms of child symptoms, but found a significant difference for diagnosis. The privately referred sample more often had a primary diagnosis of specific phobia, GAD, and OCD than the publicly referred sample. Additionally, publically referred children had significantly lower family income, parental education, and were more likely to live in a single-parent household (Southam-Gerow, Chorpita, Miller, and Gleacher, 2008).

Most recently, Ehrenreich-May and colleagues examined differences between two different primary diagnoses of anxiety and depression in youth from both a research clinic sample (Boston, Massachusetts) and a community clinic sample (Los Angeles, California) and found similar results as previous cited studies (Southam-Gerow, Chorpita, Miller, and Gleacher,
The results demonstrated significant differences according to context in each of the studies (anxiety and depression). For both the anxiety and depression study, significantly more youth in the community clinics reported being in a minority group and came from families earning less income. In the anxiety study (n = 353), significantly more youth in the community clinics had higher rates of ODD, endorsed higher levels of delinquent and aggressive behaviors and attention problems (per parent report), and were generally more clinically elevated on attention and delinquent problems when compared to the youth from the research clinic sample. In the depression study (n=109), significantly more youth in the research clinics reported higher rates of Social Phobia, OCD, and GAD and youth from the community clinics had higher rates of ADHD and ODD. Additionally, youth in the community clinics had higher clinical elevations in delinquent problems (Ehrenreich-May, Southam-Gerow, Hourigan, Wright, Pincus, & Weisz, 2011).

The hypothesis of case differences has also been evaluated with youth disruptive behavior disorders (DBDs) in a community setting. Baker-Ericzén and colleagues (2010) compared child, parent, and family characteristics in usual care (UC) and empirically-supported treatment (EST) samples with youth diagnosed with DBDs, including oppositional defiant disorder (ODD), conduct disorder (CD), and DBD Not Otherwise Specified (DBD NOS). Five ESTs were selected and were considered either well-established or probably efficacious. Results suggested that youth in UC were at a higher rate of comorbidity, were more likely to have single parent poverty households (58% for UC vs. 15%-47% for EST). Parents in the EST studies were more educated, more stressed, but possibly more depressed than those in UC. Family characteristics suggested that UC families had lower incomes (62%) compared to EST (32%-53%) families.
Many also suggest that the lack of fit of intervention program is an indicator of science-practice gap. For example, Lau argues that although research suggests that the practice-science gap is due to differences between patients in real-world settings and participants in research trials, the gap can further be explained by the lack of inclusion of minority youth and multi-problem families in randomized control trials (Lau, 2006). Evidence-base treatment development based on work with homogenous samples fails to take into account many differences associated with different cultural groups (e.g., values, child-rearing traditions, distinctive stressors and resources). The current method attempting to bridge the science-practice gap assumes that findings from effective treatment studies are generalizable to diverse populations (Guerra & Knox, 2008).

The literature suggests that client factors are an important dimension for the dissemination of EBTs and thus warrant attention. The literature also tells us that in fact, there are differences between children that are treated in community-based clinic settings versus university-based clinics. Families demonstrate differences in these two contexts through socioeconomic status (SES), family composition (single versus intact family), ethnicity, as well as differences in child diagnosis (comorbidity frequencies tend to be higher in community settings). Relevant child factors are one dimension of the mental health system that can be better understood through mental health stakeholder perspectives to help inform dissemination efforts.

Provider Factors

Researchers as well as clinic providers are concerned about the existing science-practice gap, however, often times efforts to close this gap neglect provider perspectives. As such, Higa and Chorpita (2008) argue that provider knowledge (i.e., awareness of the available treatments and competency in delivery of the mechanics of treatment) and provider attitude toward evidence based treatments are relevant factors in how well an EBT would fare when tested in a novel
setting. Provider knowledge entails the awareness of the availability of EBTs as well as the ability to process, understand, and integrate the research findings as well as ability to perform the treatment. Few providers access research findings in general outlets, such as scholarly journals (Kirk & Reid, 2002). If they do, the information and language may be confusing and not easily understood (Bellamy, Bledsoe, Traube, 2006). The mere confusion and inconsistent definitions and labels provided for what is considered evidence-based treatment can be a clear obstacle for a therapist when choosing to implement a specific treatment with a specific client. For example, Division 12 Task Force (APA Task Force, 1995) categorizes empirically supported treatments (ESTs) into probably efficacious and well-established while the Substance Abuse and Mental Health Services Administration (SAMHS) categorizes evidence-based programs into promising, effective, and model. Likewise, learning evidence-based practices requires considerable training and supervision and we do not yet know the dosage and quality of delivery needed to lead to optimal outcomes.

Studies have found that theoretical orientation and practice setting are related to provider attitudes about EBTs, such that cognitive behavioral orientation and academic settings were predictors of positive EBT attitude (Addis & Krasnow, 2000). Additionally, it is believed that a provider’s attitude toward evidence-based practices (EBPs) together with the base of knowledge he or she has about EBPs will be predictive of utilization of EBTs (Higa & Chorpita, 2008). Specifically, Aarons (2004) identifies four dimensions of provider attitudes that may influence the adoption of EBPs: (a) intuitive appeal, (b) likelihood of adopting EBP given requirements to do so (i.e., willing to try new ways of doing things), (c) openness to new practices and change, and (d) perceived divergence of usual practice with research-based/academically developed interventions. It is argued that common methods of training providers, for example, failure to acknowledge the complexity and the importance of provider attitudes. In a study of 332 clinical
and case management service providers and 51 program managers providing mental health services to children and adolescents, findings revealed that providers in programs with written policies and regulations scored higher on the appeal dimension subscale. Additionally, positive attitudes to adopting EBPs (high intuitive appeal scale score) were associated with higher educational attainment. Interns in training (versus professional site providers) from community mental health settings scored lower on the divergence scale, indicating less perceived divergence between EBP and current practices and interns were also more likely to positively endorse adoption of evidence-based practices. Providers from day treatments scored higher on the requirements scale suggesting that they had a positive attitude toward adopting EBPs when required to do so (Aarons, 2004). This suggests that interns may be more open to adoption of EBPs relative to providers with more years of experience in the field. Given the key role of providers in community clinic settings, it is imperative to understand factors that may affect acceptance and dissemination of EBPs, specifically provider knowledge (i.e., language, label definitions) and attitudes about EBPs (i.e., appeal, likelihood of adopting the new requirements, openness to the new practices, and how divergent the new practices are perceived to be from the old).

**Intervention Factors**

Intervention factors relate to the focus of treatment protocol (if any), such as a specific manual for an intervention program, or to the complexity of the intervention model. Given the vast availability of EBTs for any one child problem area or disorder, selecting an intervention becomes complicated. Adding to the complexity is the almost complete lack of guidance for how to proceed when treating a client with multiple impairing problems. The complexity of intervention programs can impede their implementation (Rogers, 1995) as training providers in multiple treatment protocols and procedures (e.g., forms, checklists, manuals) is not feasible.
because often this is not consistent with routine procedures in a community clinic setting (Chorpita, Becker, & Daleiden, 2007).

There is also the difficulty in having to train, supervise, and monitor therapist delivery of the treatment program for treatment fidelity reasons (i.e., the degree to which interventions are administered as intended and in a reliable manner; see Moncher & Prinz, 1991). These intense intervention procedures are employed to maximize fidelity in efficacy trials, however, are not generally used for dissemination (McHuge, Murray, & Barlow, 2009). Dissemination fidelity monitoring necessitates different methods from efficacy trial fidelity monitoring due to the differences in time, financial support, and limiting sustainability of ongoing “expert” supervision (McHugh, et al., 2009).

Some have also postulated that research treatments tend to be behavioral, problem focused, and based primarily on written manuals (Schoenwald & Hoagwood, 2001). Further, different models of intervention development and testing are likely to result in different implications for speed of innovation. Chorpita, Daleiden, and Weisz (2005) suggest that models that do not incorporate adaptation from the beginning may struggle when attempts are made to disseminate the intervention to community settings. They further argue that defining an intervention at the level of a manual distorts validity of research and ability to replicate because each new clinical trial makes some change to the manual, and change is inevitable at the dissemination phase.

Therefore, the literature indicates that intervention factors can also affect the dissemination of EBPs such as the complexity of a treatment protocol or lack of treatment protocol all together. Research additionally demonstrates that intervention program requirements (i.e., training and supervisory man power, resources for assessment, rigid “manual”) are not always feasible in a community clinic setting.
Organizational Factors

Organizational factors have also been suggested as important in dissemination efforts, including training, social influence, organizational support, leadership, culture (i.e., implicit norms, values, shared behavioral expectations, and assumptions), and climate (Aarons, 2005). For example, Aarons (2005) presents a conceptual framework for the role of therapist attitudes in acceptance and implementation of evidence-based practices at both the individual level (i.e., therapist) and the systems-level (i.e., mental health organization). Specifically, Aarons argues that leadership can affect many aspects of a mental health environment, including effective operation of a mental health organization. Additionally, leadership is linked with higher commitment and job satisfaction in service provider organizations (Glisson & Durick, 1988; Aarons, 2005). Organizational culture such as the mental health organization’s implicit norms, values, and assumptions is an important factor in influencing provider attitudes, perceptions, and behaviors. For example, negative organizational culture has been associated with providers having a negative attitude toward adopting evidence-based practices and positive organizational culture has been associated with more openness to adopting evidence-based practices (Aarons, 2005). Research also suggests that social influences that are supportive of innovation (e.g., support for creativity and risk taking, teamwork, speed of action, tolerance of mistakes) facilitate and support provider uses of evidence-based practices (Cialdini, Bator, & Guadagno, 1999; Aarons, 2005). Further, Aarons suggests that when providers utilize evidence-based practices and have positive experiences with them, there is an increase in favorable attitudes about innovations among peer providers (both within and between mental health sites) and thus increase use of the innovation. Further, Aarons (2004) found that mental health programs with lower levels of bureaucracy also endorsed more positive attitudes of adopting EBPs.
Likewise, Hemmelgarn and colleagues (Hemmelgarn, Glisson, & James, 2006) suggest that organization’s social context is important in molding the attitudes and behaviors of organizational work members. Social context is described as a two part construct which includes the culture (i.e., norms, values, beliefs, and behavioral expectations that enforce behavior and communication within an organization) and psychological climate, an “individual employee’s perception of the psychological impact of the work environment on his or her own well-being,” of the organization (Hemmelgarm et al., 2006, p. 77). The social context of an organization is relevant as it facilitates the selection of interventions to be implemented, decisions that will be made, and how problems will be solved. Specifically, they note that constructive organization cultures that emphasize motivation, minimization of conflict, and flexible structures that share control and authority are more likely to adopt innovative programs (Cooke & Szumal, 2000).

In an RCT, Glisson and colleagues (Glisson, Schoenwald, Hemmelgarn, Green, Armstrong, & Chapman, 2010) assessed the effectiveness of MST with and without an organizational intervention that addressed service level barriers as they pertain to the adoption of EBTs in the organizational context with 14 counties (a sample of 615 youth). This organization intervention was labeled ARC for availability, responsiveness, and continuity. Results revealed that at 6-month assessment, youth in the MST+ARC condition had nonclinical level total problems and significantly lower symptoms than other conditions (MST only, ARC only, and control). Additionally, this group entered out-of-home placements at significantly lower rates (16%) than youth in the control condition (34%). These findings represent important support to the notion that organizational factors are crucial in dissemination of psychological treatments.

Organizational factors appear important issues to consider in dissemination research. Specifically, positive leadership and a constructive organizational culture have an impact on the entire structure of an organization and are particularly important in molding providers’ attitudes.
toward adopting EBPs. To date, very few studies have considered how to address organizational factors when disseminating EBTs to community settings.

**System Factors**

Likewise, there is minimal research on system factors despite the influence on dissemination efforts. Some have suggested that system level factors may affect areas such as financing methods for mental health services (e.g., funding for training therapists) and coordination of care and services. Mental health providers often work under federal, state, and county policies and regulations (Aarons, 2004) and thus a major barrier to dissemination is difficulty acquiring the needed resources and funds to train clinicians (Barlow, Levitt, & Bufka, 1999). Mental health organizations may want to implement evidence-based practices, but may be unable to due to limited funding and/or resources such as training materials (Gunter & Whittal, 2010). Specifically, deficiencies in the necessary training, materials, time and staff dedication to researching evidence make the utilization of evidence-based practices difficult (Bellamy, Bledsoe, Traube, 2006).

In a study of barrier perceptions, Gunter and Whittal (2010) found that many social workers in mental health settings considered training time and funding policies to be the biggest obstacles to implementing evidence based practices. Grant funding may address the latter concern, however, grant funding is often time-limited and may not reflect clinic routines and procedures (Schoenwald & Hoagwood, 2001). For example, financing at a community clinic may be on a fee-for-service basis and thus outcomes may not be achieved in the time period of the grant.

Additionally, the system of care is a relevant factor in that it pertains to how well a system cooperates in coordinating care and services for children and their families. Bickman demonstrated that coordination in a system of care facilitated access to mental health services for
children and their families and increased satisfaction with services among families (Bickman, 1996). This is an important factor as research demonstrates a relationship between care satisfaction in families and treatment attrition, such that more care satisfaction relates to increased likelihood of treatment continuance (Brookman-Frazee, Haine, Gabayan, & Garland, 2008).

Equally important is the increase in collaboration with research funding agencies and journal editors through professional meetings to specifically focus on dissemination research publications (Kerner, Rimer, & Emmons, 2005). Specifically, Kerner and colleagues suggest that a partnership between funding agencies and service delivery agencies is necessary for adequate dissemination in addition to partnerships between researchers and organizations where the research is to be conducted.

The basic assumption or theory is that mental health providers, organizations, and service systems will adopt evidence-based interventions and programs or that these interventions will naturally diffuse throughout. However, as the literature described above suggests, there are multiple dimensions at play in our mental health service system (i.e., client, family, provider, intervention, organization, and system) that warrant attention in dissemination research. For example, client and family factors are important to consider as research highlights the influence of basic setting (community clinic versus university clinic) differences through comorbidity, referral source, diagnosis, or family income and stress level. Likewise, evidence suggests that provider factors such as provider attitudes and knowledge toward EBTs and level of training in the mental health field are relevant to dissemination research. As important is the complexity of the intervention model, the social context (culture and psychological climate of an organization), the leadership and structure of a mental health organization, system factors including financing methods for dissemination of a treatment program to a community setting (e.g., funds to train,
materials for intervention), and coordination of the mental health system. Given that several dimensions affect the complexity of community-based mental health services, many have proposed a variety of solutions, a topic I turn to in the next section.

**Models of Dissemination Research**

There have been numerous ways that researchers have proposed to address the science-practice gap in dissemination efforts and have attempted to formulate approaches to dissemination. As Silverman, Kurtines, and Hoagwood (2004) highlight, there is a need for dissemination theory. There have been notable efforts to develop these types of models. First, I will highlight three dissemination models: the (a) deployment-focused model (DFM; Weisz, Jensen, & McLeod, 2005), (b) clinic intervention development (CID) model (Hoagwood, Burns, & Weisz, 2002), and (c) mental health system ecological model (Schoenwald & Hoagwood, 2001) all of which suggest that effective dissemination requires partnership involvement with relevant persons. Briefly, the DFM/CID model suggests that relevant persons (likely those delivering the services such as therapists or teachers) should be involved in the intervention development process from the initial stages. The mental health system ecological model further suggests that multiple levels of variables should be considered when planning to disseminate a mental health treatment (e.g., client/family, provider). Second, I will describe partnership research and highlight how the approach can incorporate aspects of all three models. In addition, the participatory action research approach in particular will be described (PAR; Jason, Keys, Suarez-Balcazar, Taylor, & Davis, 2004).

**Deployment-Focused Model (DFM) & the Clinic Intervention Development (CID) Model**

The clinic-based treatment development (CBTD) model, now called the deployment-focused model (DFM) of intervention development and testing (e.g., Weisz, Jensen, & McLeod, 2005) intends to break down distinction between clinical trial research and mental health service
research. This model is specifically guided by three aims: (a) producing treatments that can easily fit into everyday practice, and work well with a clinic-referred populations in a clinic setting with practice clinicians, (b) generating research on treatment outcome in practice settings so that the utility of these practices can be assessed, and (c) producing a body of research on the nature, components, and moderators and mediators associated with treatment impact that is externally valid and relevant.

An extension of the DFM is the clinic intervention development (CID) model, which embodies the core elements of the DFM with a few modifications. Unlike the DFM, the CID model incorporates practice-setting variables in the initial construction of an intervention protocol and highlights the final goal as treatment sustainability for validation of successful dissemination of the treatment (Hoagwood, Burns, & Weisz, 2002).

**The Mental Health System Ecological (MHSE) Model**

Distinct from the preceding models, Schoenwald and Hoagwood (2001) developed an approach that strictly addresses mental health: The Mental Health System Ecological (MHSE) Model. The framework emphasizes the importance of considering multiple layers such as client, provider, agency, and service system layers before embarking on large-scale dissemination projects. The basic essence of the model is in contextualizing treatment development and adaptation by focusing on the entire ecology. In particular, it is common for treatment development models to focus solely on client factors such as symptoms/diagnoses. However, the MHSE model recommends a broader focus also considering other possible aspects relevant to the mental health system that are in transaction with the client factors (symptoms, functioning). For example, the level of professional experience or attitude of providers in the specific mental health agency, the location of care in which this client will receive these services, the cultural climate of the organization in which the client will receive those treatments, and policies in this
specific service system all have potential consequences for the client’s mental health outcome. This model emphasizes the importance of considering these factors (client, provider, agency, and service system) to help maximize how well and fully dissemination efforts will succeed. The mental health system ecological model is a framework for conceptualizing the complexity of the mental health system and thus provides the *what* and the *who* of dissemination, but it is not necessarily describe the *how* of dissemination.

**Partnership Approach**

The aforementioned models illustrate a set of considerations for embarking on dissemination research. The DFM and CID models attempt to break down the distinction between clinical trial research and mental health research by providing a series of phases and recommendations to facilitate the collaboration between research and practitioners for treatment derived from research, as well as for treatment derived from practice (Weisz, Chu, & Polo, 2004). As noted, the MHSE model does not suggest how to develop treatments, but instead focuses on detailing the various factors that should be considered in dissemination research. Thus, the primary guidance of these models is for researchers to develop and adapt treatments in community settings while considering the multiple contextual factors involved. A potential method for achieving this goal is through a partnership approach, a process of understanding more about relevant mental health stakeholder perspectives to make EBTs a reality in those settings. I propose that a partnership approach is warranted for adequate understanding of the complex levels of a mental health system in disseminating a mental health treatment into a diverse setting. In this section, I will begin by defining what is meant by partnership research and second, provide a description of one specific framework known as participatory action research.
Partnership research, sometimes termed "engagement scholarship," is a method of collaborative work with a primary goal of understanding and obtaining perspectives from different stakeholder on a given complex problem (van de Ven, 2007). This method has been used in many areas of inquiry such as in educational health initiatives to promote HIV and AIDS-related stigma reduction in South Africa (Airhihenbuwa, Shisana, Zungu, BeLue, Makofani, Shefer, Smith, & Simbayi, 2011), to evaluate an elementary school nutrition intervention (Jenike, Lutz, Vaaler, Szabo, Mielke, 2011), to promote cardiovascular health (e.g., Kim, Koniak-Griffin, Flaskerud, & Guarnero, 2004), or for management and tourism purposes (e.g., Lainga, Leeb, Morreb, Wegner, & Weilera, 2009). There has been less popularity in the field of mental health with most of the focus being placed on substance abuse (e.g., Backer, 2003; Backer, Liberman, & Kuehnel, 1986; Gotham, 2004). The substance abuse literature on intervention development particularly highlights the critical importance to dissemination of creating and sustaining partnerships between researchers and community-based providers (Backer, 2003). However, more recent efforts have also included the use of this framework for the treatment of depression (e.g., Getrich, Heying, Willging, & Waitzkin, 2007).

As previously noted, one specific method of partnership research is participatory action research (PAR; Jason, Keys, Suarez-Balcazar, Taylor, & Davis, 2004). The primary aims of PAR are to empower individuals and facilitate change in political, social, and organizational levels by integrating them into the research process. PAR is a flexible method, depending on the context of research and the degree of power that is granted to the relevant stakeholders (e.g., providers, clinic administrators) over the process. In general, researchers using PAR must make three primary choices (a) the degree to which partners will have control over the research (from “none” to “equal control with partners and research team”), (b) the extent of partner collaboration (from “minimal” to “active researchers and research leaders”), and (c) and the level
of partner commitment to the research (from “none” to “full ownership”). In other words, participant involvement in PAR implementation runs on a continuum with “low involvement” indicating that the partners have minimal involvement and almost no power over the actual project and “high involvement” indicating participants have equal authority and control over of the research process (Jason et al., 2004).

There are several reasons for incorporating partnership methods to dissemination research and engaging stakeholders in the process. Provided that stakeholders (i.e., researchers, practitioners, clients/families, clinic administrators) have relevant contributions that can influence the development of a treatment and procedures, a partnership approach such as PAR can improve the innovation and potentially sustain it in the setting by enhancing the relevance of the project to all stakeholders and engaging them in the process. This method may benefit child mental health treatment development as it has in other areas of mental health.

The present study applies a PAR approach to the problem of how to transport EBTs to community settings. Specifically, the present study sought to use the PAR approach to understand the perceptions of stakeholders in a large mental health service agency in central Virginia regarding mental health services. To accomplish this goal, qualitative methodology was chosen.

**Qualitative Methodological Approach**

Qualitative research includes a wide array of methods such as interviews, observation, and reviews of written documents (for review, Patton, 2002). For this study, I chose to use interviews. In the first part of this section, I will describe the most common types of interviews used in qualitative methods, interviews and focus groups and the advantages to these methods. Second, I will justify the use of qualitative methods for this study, including how these methods would enhance dissemination research.
Interviews are a method for collecting in-depth information and quotations directly from participants about their perceptions, experiences, concerns, or knowledge (Patton, 2002). Interviews can occur in person or from afar by telephone or other technology (e.g., Skype). In addition, interviews can be conducted one-on-one or in focus groups. The focus group is a research technique in which guided interactional discussion is employed as a means of generating rich experiential information (Krueger & Casey, 2000). This method can either identify potential areas of inquiry or help clarify others. The focus component of the interaction can be anything that engages the group in collective activity (e.g., discussing a particular issue, watching a film) (Powell, Single, & Lloyd, 1996). In addition, Krueger and Casey (2000) suggest that it is often more favorable to refrain from mixing different types of people within one focus group. For instance, if the purpose of a study is to obtain information on how men’s and women’s opinions differ or are similar on a particular issue, Krueger and Casey suggest it best to keep these groups in separate focus groups. There are two main reasons for this: (a) analysis of data (i.e., it is easier to compare and contrast across groups) and (b) creating a comfortable environment for different levels of expertise or power so that group members feel comfortable speaking on the issue. Further, focus groups are aimed at explicitly placing focus on the stakeholders rather than on the researchers. This is a potentially powerful strategy, as it regards the stakeholder as the “real” expert. The non-directive nature of the focus group allows participants the opportunity to discuss concerns, disagreements, or to explain thoughts or ideas. This enables the researcher/s to investigate topics in depth by moderating the discussion as participants explore the issues. Alternatively, individual interviews are more private in nature than focus groups and thus may encourage the individual to share more openly. According to guidelines by Krueger and Casey (2000), if there is reason to believe that an individual’s inclusion in a focus group would have deleterious effects, it is best to accommodate that
individual with a separate interview. Nonetheless, both methods allow for the use of similar topics/questions with stakeholders and are valuable in obtaining in-depth information from the “real” experts.

Qualitative methods may be a beneficial approach for further understanding the science-practice gap of treatment dissemination, with two reasons in particular supporting their utility. The first relates to the importance of understanding the various variables involved in a mental health system (Schoenwald & Hoagwood, 2001) and integrating the perspectives of relevant stakeholders in a cohesive way. Focus group and interview methods lend themselves to the accumulation and integration of perspectives of the various stakeholders in a community mental health setting. Understanding stakeholder perceptions about mental health services may provide a meaningful picture of what is working, what is not, what is confusing, and what is important (Richter, Bottenberg, & Roberto, 1999). The second reason relates to the paucity of research related to the deployment of child EBTs to community mental health settings. Although there is some research on stakeholder attitudes, primarily providers (e.g., Aarons, 2005; Addis & Krasnow, 2000), of EBTs in community mental health settings, we have yet to understand how best to incorporate these perspectives and attitudes to best address the science-practice gap.

The Present Study

This review has expanded on various areas of research that are relevant to a participatory approach to dissemination research. Research demonstrates that we have excelled in both developing criteria for identifying what is considered “evidence-based” and have developed a plethora of evidence based treatments for youth mental health problems. However, researchers have not been as successful at effectively disseminating them to diverse community settings. There are many posited reasons for this fact, such as provider lacking EBT knowledge or the notion that research-based clients differ from community clinic clients. Consequently, a variety
of models have been posited as a way forward. The mental health system ecological model is particularly relevant to dissemination in EBTs, as it considers all levels of the mental health ecology and states that all are potentially imperative for effective dissemination. Further, it is posited that a PAR methodology is relevant to addressing the need for involvement of mental health stakeholders in the development, adaptation, and dissemination of EBTs. One methodological approach to obtaining data is through focus group, a qualitative method found effective in capturing different stakeholder group perspectives.

Therefore, the proposed study aims to employ the mental health ecological approach through a partnership model as a way of understanding and conceptualizing potential intervention adaptations and considerations from stakeholder perceptions. As Hoagwood and Olin discuss, “the science base must be made usable. To do so will require partnerships among scientists, families, providers, and other stakeholders” (Hoagwood & Ollin, 2002, p. 764). In this study, a stakeholders is defined as someone who is involved with the mental health services system by holding employment by a mental health agency/program (i.e., mental health provider, administrator) or by receiving services directly or indirectly (i.e., parent) (Aarons et al., 2009).

The proposed study is guided by three specific aims:

**Specific Aim 1.** Examine the stakeholders group perspectives on mental health services. All stakeholder group perspectives will endorse variables from across all tier levels consistent with the Schoenwald and Hoagwood (2001) MHSE model, however:

*Hypothesis 1.* Providers will raise more concerns related to provider and administrative/organizational factors as compared to parents or administrators.
Hypothesis 2. Parents will raise more concerns related to client/family variables such as family or life stressors as compared to providers or administrators.

Hypothesis 3. Administrators will raise more concerns related to system and organizational level factors as compared to parents or providers.

1. **Specific Aim 2.** Gain valuable knowledge and understanding of the extent to which the two provider focus group profiles are consistent in thematic responses.

2. **Specific Aim 3.** Describe responses from stakeholders that do not fall under the MHSE model.

**Method**

**Overview**

Data for this study were drawn from a larger research endeavor, the Adaptation of Depression and Anxiety Psychological Treatments for Children (ADAPT) project. ADAPT is an ongoing research partnership between the VCU research team and stakeholder groups associated with the publicly-funded, community mental health clinic for children and families in large county in central Virginia. The present study involved both focus group and individual interviews conducted in 2005 consisting of three separate stakeholder groups: (a) parents of child clinic consumers, (b) service providers, and (c) clinic administrators. A summary of participant characteristics can be found in Table 3. Participants received a $25 gift card for their participation. Recruitment procedures and questioning route used in focus groups and individual interviews differed slightly and are described in a later section. This study received institutional review board approval by both VCU and the participating agency.
Focus Group Moderators and Interviewers

The moderator and interviewer team consisted of a faculty level investigator (PI) and two graduate level students. The PI of the study was the moderator of focus groups and conducted all interviews and focus groups, with the exception of the two provider focus groups, which were moderated by an advanced graduate student. Since the PI held a clinical supervisory role over some providers at the agency at the time of data collection, it was preferred to have an unaffiliated focus group moderator to lead these groups. The PI had direct training and consultation in moderating focus groups and interviewing techniques (e.g., open-ended questioning) and qualitative methodology prior to initiation of data collection from a qualitative methods expert, while the advanced graduate students were trained by the PI. Additionally, the PI worked in consultation with a qualitative research expert throughout the project.

Participants

Participants were from three separate stakeholder groups: (a) parents of children and adolescents receiving mental health services from the community clinic, (b) service providers, and (c) clinic administrators.

Parents. Parent participants were parents of children ages 9 to 14 who had or who were receiving mental health services at the agency. A total of three female parents participated. Although the original plan was to hold a focus group with parents, due to the small sample size, individual interviews were conducted instead. Two parent participants identified as Caucasian and one identified as African-American. Two reported being married and one reported being single. Additionally, parents generally reported obtaining a high school diploma/GED or completing some college, and the annual income ranged from $15,000 to $70,000.

Service providers. Service providers consisted of clinic therapists providing services to children and families at the agency. A total of 11 providers participated in one of two separate
focus groups. Most providers were Caucasian (90.9%) with a Master’s degree level education (81.8%). Almost half (45.5%) of the providers were male and annual income reported ranged from $44,000 to $145,000.

Administrators. All clinic administrators were eligible for the study and a total of seven clinic administrators volunteered. Administrator participants were all Caucasian and consisted primarily of male participants (71.4%) with a Master’s level education or higher. Annual income reported by administrators ranged from $85,000 to $225,000.

Procedures

Parent recruitment. Parent participants were recruited from the current outpatient caseload at the clinic through informational flyers. Therapists provided parents of clinic consumers that matched study goals (i.e., children and families were receiving weekly outpatient psychotherapy focused primarily on anxiety, depression, or conduct problems) with flyers and study contact information.

Provider recruitment. The research team attended several staff meetings to provide information about the study to clinic providers and interested therapists were asked to sign up for a focus group meeting.

Administrator recruitment. The principal investigator of the study also attended several administrative meetings and invited clinic administrators to participate in the study. Invitations were also mailed out through email and postal mail to clinic administrators.

Interviews/Focus groups. All participants took part in an informed consent process. Before beginning focus group and individual interviews, all participants completed demographic information forms.

The principal investigator conducted the three individual interviews of parents and the focus group with the administrators. Given the principal investigator’s proposed supervisory
role over clinic providers for a later phase of the ADAPT project, focus group interviews with providers were conducted by an advanced clinical psychology graduate student. In the end, a total of three focus group interviews were conducted with administrators and service providers and three individual interviews were conducted with parent participants. All interviews and groups lasted approximately 75 to 90 minutes.

**Questioning route.** The project was introduced to all participants as a way of understanding individual stakeholder needs, organization needs, and client needs when adapting treatment programs to best help families served at the clinic. Although the questioning route differed slightly for each stakeholder group, the main areas covered for all groups aimed to assess participant descriptive perceptions on (a) etiology of anxiety, depression, and conduct related problems, (b) the “perfect” or “ideal” treatment for anxiety, depression, and conduct related problems (c) barriers and limitations to making these “ideal” treatments available, (d) reasons for participating in the research study, and (e) what else the research team should know before beginning the study.

**Recordings to transcriptions.** All interviews were audiotaped using an Olympus OM-3 recorder. Two senior undergraduate research assistants transcribed the audiotaped sessions, after which the PI checked the transcripts against the recordings. I further assessed the accuracy and quality of the transcription in a secondary transcription check of all individual and focus group interviews by listening to full length sessions and assessing accuracy of the transcriptions. This third check of the transcription had a dual purpose: 1) to verify accuracy of content, as stated, and 2) to facilitate my familiarization with the data, as I was not present during this phase of data collection.
Table 3.

Table of Participant Service Provider, Administrator, and Parent Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Service Provider (N=11)</th>
<th>Administrator (N=7)</th>
<th>Parent (N=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age – M (SD)</td>
<td>40.00 (2.43)</td>
<td>51.86 (2.60)</td>
<td>40.50 (7.50)</td>
</tr>
<tr>
<td>Race – N (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>10 (90.9%)</td>
<td>7 (100%)</td>
<td>2 (66.7%)</td>
</tr>
<tr>
<td>African-American</td>
<td>1 (9.1%)</td>
<td>0 (0%)</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>Gender – N (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>6 (54.5%)</td>
<td>2 (28.6%)</td>
<td>3 (100%)</td>
</tr>
<tr>
<td>Male</td>
<td>5 (45.5%)</td>
<td>5 (71.4%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Marital Status – N (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>7 (63.6)</td>
<td>6 (85.7%)</td>
<td>2 (66.7%)</td>
</tr>
<tr>
<td>Single</td>
<td>2 (18.2%)</td>
<td>1 (14.3%)</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>Domestic Partnership</td>
<td>1 (9.1%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Divorced</td>
<td>1 (9.1%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Education Level – N (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;Master’s Degree</td>
<td>2 (18.2%)</td>
<td>2 (28.6%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>9 (81.8%)</td>
<td>3 (42.9%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>0 (0%)</td>
<td>2 (28.6%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Some college</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>HS Diploma/GED</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (66.7%)</td>
</tr>
<tr>
<td>Annual Income – M (SD)</td>
<td>78,400 (31482.62)</td>
<td>140,496.29 (46,496.29)</td>
<td>44,666.67(27,754.88)</td>
</tr>
</tbody>
</table>
**Data Analysis**

**Overview.** One way to differentiate approaches to qualitative data analysis would be to clarify whether the investigator plans to (a) rely on knowledge from past work when organizing new data, or to (b) allow the themes to emerge from the new data. In this project, the former approach was taken, with the preceding literature review standing as the basis for organizing the qualitative data, with particular emphasis on the general conceptual model in mind, based on Schoenwald and Hoagwood (2001; also see Southam-Gerow, Hourigan, & Allin, 2009). A primary goal of the present study was to identify the themes deemed relevant by the three stakeholder groups, to examine how patterns of those themes are distributed across the Schoenwald and Hoagwood model, and how the numbers of themes identified across the model differ among the three stakeholder groups.

**Analysis plan.** The purpose of the study was to examine the perceptions of three groups of mental health stakeholders with regard to improving mental health services for children and families. The analytic approach involved: (a) a rigorous qualitative approach to coding the word data, and (b) a quantitative approach to identifying frequencies of categorical themes to provide quantitative descriptive data about stakeholder responses and to permit comparisons among stakeholder groups. To facilitate the coding of data, relationships, definitions, and general study findings from the literature were identified as they relate to improving mental health services for children and families. Relevant factors have been described in this literature review under client/family-, provider-, intervention-, organizational-, and service-level factors relating to implementation barriers. These factors were used as a basis for the development of the coding manual.

Preliminarily, I removed irrelevant “noise” (e.g., “ums” and “ahs”). Once the data was thus prepared, the coding team engaged in a unitization process. First, they unitized one
transcript independently. Unitization involves the identification of the smallest piece of information that can be understood as one complete thought, or one complete unit (Rodwell, 1998). Rodwell further notes that units can be as short as a word or as long as several paragraphs, but each must stand alone as one complete idea or thought (1998). Second, after the unitization of one transcript, the coding team met to discuss and reach consensus on the final units. Next, the team unitized all transcripts independently and met again to reach consensus and resolve any conflicts in the unitization phase. After all transcripts were unitized, the team began the coding phase.

For coding, the following procedures were used. First, a preliminary code book was established, based on the literature search described earlier. Next, the principal investigator and I coded one transcript together using the initial codebook. Units were permitted to be assigned to more than one code. During and after coding the transcript, the coding manual was revised. Further, the team clarified code definitions and established “decision rules” for the codes (Rodwell, 1998). With the revised codebook, the remaining unitized data were coded independently. The coding team met again to discuss until consensus had been reached for all codes (see Appendix A for final coding book).

Coded data were entered into NVivo 9, a computer software program for qualitative data, which allows for “tagging” of codes directly from transcript documents. Various NVivo processes were used to organize and analyze the connections between codes and stakeholder groups. In addition, frequencies were tabulated for each code identified and were entered into an SPSS 17.0 database. The data analysis of the frequency data involved a non-parametric test, the Mann-Whitney test (cf. independent sample t-test) which is recommended when assumptions of normality or assumptions of homogeneity of variance do not apply.
Results

Overview

This focus group interview study involved an analysis of qualitative data related to stakeholder perceptions of children’s mental health services. Results are presented here as follows: (a) data handling and reduction procedures, (b) frequencies for the qualitative codes, (c) quantitative comparisons among stakeholder groups across the qualitative codes, (d) cluster analyses, and (e) post hoc analyses.

Data handling and reduction. Coders consisted of a doctoral-level clinical psychologist and myself, a graduate student in clinical psychology. Initially, I cleaned all transcripts of irrelevant jargon (e.g., “um” or “aha”), participant names, questions from focus group moderators, and the introduction speech by research moderators. After data were cleaned, they were unitized by both coders. The unitization phase of data involved both coders dividing the transcripts into many individual units of data, each comprising a single thought or ideas. Coders unitized one transcript independently and met to reach consensus. Subsequently, the remaining transcripts were independently unitized and both coders then met again to reach consensus. After data were unitized, I developed a coding manual consisting of codes derived from the MHSE model. Both coders met to discuss and revise the manual. This coding manual was piloted using one transcript, in which both coders independently coded data and met to both reach consensus on codes and modify the manual. This process was repeated for another iteration of transcript data until both coders had fewer discrepancies.

Coding discrepancies were defined as follows: (a) No discrepancy = 0, (b) Level one discrepancy = 1, 1+ overlapping codes, and (c) Level two discrepancy = 2, 0 overlapping codes. After coding one transcript, coders achieved 61% agreement (Level 0); after coding two additional transcripts, coders achieved 58% agreement (Level 0); and after coding three
additional transcripts, they achieved at 92% agreement. After reaching 92% agreement, the coding manual was revised and I coded the remaining data using the finalized coding manual. Previously coded data that did not match modified coding manual were re-coded by coder 1.

All data were initially coded on an Excel spreadsheet by both coders. Once data was ready for analysis, it was uploaded into the qualitative data analysis computer software, NVivo 9. NVivo allows for “tagging” of codes directly from transcript documents. This step was completed by an advanced undergraduate research assistant. I assessed for accuracy of “tags” on NVivo as a secondary data check for each transcript once initial tagging was completed. In the final step, I ran a matrix query (Stakeholder group X Code type) on NVivo and uploaded frequency data onto a qualitative data analysis computer software, Statistical Package for the Social Sciences (SPSS 17.0, 2008).

Demographic data were also available for each participant. The majority of data were complete, with the exception of one age and one income data point. Data for these participants were included in analysis and missing data points were flagged in SPSS as discrete missing values with a numerical value of 99. These demographic data are presented in Table 1.

**Theme frequencies**

This section presents the results of frequencies made among stakeholder groups about each broad level factor for the coding manual by group type (i.e., parent, provider, and administrator). The codes were derived from the Mental Health Systems Ecological (MHSE) model, which suggests that multiple contexts are important to consider in dissemination and implementation efforts and incorporates: (a) client-level, (b) provider-level, (c) intervention-specific, (d) service delivery, (e) organizational, and (f) service system characteristics. From this model, it was hypothesized that all stakeholder groups would endorse from across all tier levels of the MHSE model. This hypothesis was supported, per frequency results presented in all levels
of the model by each stakeholder type. Since a goal of this study is to assess the multiple levels of the model and to assess quality of theme across stakeholders, I have retained all themes for analysis despite considerably low frequency counts for some themes (e.g., community theme). The aim of the following section is to provide the reader with frequencies for each code according to stakeholder group.

**Overall frequencies.** The client, family, community, provider, intervention, organization, and system theme definitions provide the necessary scope for understanding the following sections, which are aimed at describing theme frequencies for each stakeholder group. Broadly, there were 2,600 units of total word data across the 21 stakeholder participants. The parent group (n=3) accounted for 46% of the data (n units = 1,191), or 397 units per participant whereas the provider group (n=11) accounted for 45% of the data (n units = 1,156), or 105 units per participant. The administrator group (n=7) accounted for 9.7% of the data (n units = 253), or 36 units per participant.

**Frequency results from parent interviews.** Table 4 presents the frequency data of themes from parent interviews. Although all groups had a wide range of child themes represented in their data, parents primarily focused on symptom-level of this theme as opposed to other areas related to children (e.g., experiences, behaviors). Parents also focused on other child-related themes, such as child abilities, child attitudes/perceptions, and child behaviors. Further, parents discussed family themes, such as family attitudes/perceptions, family behaviors/interactions, and family situations as well as organization- and system-related themes such as services attributes, culture of the organization, and availability of services. Conversely, parents rarely discussed community-related and intervention-related themes.

**Frequency results from provider interviews.** Table 4 presents the frequency data from the provider focus groups. Similar to parents, providers primarily focused on child themes. In
addition, they discussed family themes, which primarily focused on family behaviors, family situations, family symptoms, and family attitudes and perceptions of mental health. Unlike other stakeholder groups, providers more frequently discussed community themes, which mainly focused on matters related to school-involvement and gang affiliation. Additionally, providers frequently focused on intervention themes related to intervention type, intervention intensity, and provider specialty. With organization themes, providers primarily focused on availability of resources at the clinic and also frequently discussed system themes, such as multi-system involvement matters.

**Frequency results from administrator interviews.** Table 4 presents the frequency data from the administrator focus group. Administrators also focused their discussion on child symptom-level themes and identified family-level themes related to family behaviors and interactions and the family’s situations. Administrators discussed community-level themes with less frequency than providers; however, more frequently discussed intervention intensity matters. Administrators frequently focused on intervention intensity level topics. Also, administrators more frequently discussed topics related to spread of research, while providers and parents did so less frequently. In addition, administrators more frequently discussed system policies and system access of services as compared to the other two groups. With an understanding of theme frequencies, it is important now to demonstrate whether these themes differ significantly among stakeholder groups.
Table 4.

Table of Frequency and Percentage Data for Themes by Stakeholder Groups (percentage of theme between stakeholder type, percentage of theme within each stakeholder type)

<table>
<thead>
<tr>
<th></th>
<th>PARENT</th>
<th>PROVIDER</th>
<th>ADMINISTRATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD Total</td>
<td>237 (46.5%, 22.0%)</td>
<td>254 (49.8%, 32.4%)</td>
<td>19 (3.7%, 6.4%)</td>
</tr>
<tr>
<td>Symptoms</td>
<td>100</td>
<td>110</td>
<td>16</td>
</tr>
<tr>
<td>Abilities</td>
<td>20</td>
<td>47</td>
<td>0</td>
</tr>
<tr>
<td>Attitudes/perceptions</td>
<td>24</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Experiences</td>
<td>28</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Behaviors</td>
<td>47</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>Biology</td>
<td>6</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>FAMILY Total</td>
<td>553 (77.6%, 51.3%)</td>
<td>130 (18.2%, 16.6%)</td>
<td>30 (4.2%, 10.1%)</td>
</tr>
<tr>
<td>Abilities</td>
<td>15</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Attitudes/perceptions</td>
<td>106</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Experiences</td>
<td>84</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Behaviors and interactions</td>
<td>151</td>
<td>50</td>
<td>4</td>
</tr>
<tr>
<td>Situations</td>
<td>85</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Symptoms</td>
<td>40</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>72</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td>COMMUNITY Total</td>
<td>6 (24.0%, 0.56%)</td>
<td>10 (40.0%, 1.3%)</td>
<td>9 (36.0%, 3.0%)</td>
</tr>
<tr>
<td>Gang affiliation</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>School involvement</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Drug environment</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Peer environment</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>PROVIDER Total</td>
<td>107 (42.3%, 9.9%)</td>
<td>122 (48.2%, 15.6%)</td>
<td>24 (9.5%, 8.1%)</td>
</tr>
<tr>
<td>Actions/Behaviors</td>
<td>65</td>
<td>51</td>
<td>0</td>
</tr>
<tr>
<td>Attitudes</td>
<td>7</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Experiences</td>
<td>5</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Specialty</td>
<td>19</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>INTERVENTION Total</td>
<td>118 (35.9%, 11.0%)</td>
<td>164 (49.8%, 20.9%)</td>
<td>47 (14.3%, 15.8%)</td>
</tr>
<tr>
<td>Type/modality</td>
<td>71</td>
<td>68</td>
<td>14</td>
</tr>
<tr>
<td>Delivery setting</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Intensity level</td>
<td>9</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Characteristics</td>
<td>7</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Assessment triage</td>
<td>6</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Case management</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>49</td>
<td>7</td>
</tr>
</tbody>
</table>
Testing for between group differences for specific themes.

This section presents the results of comparisons made among stakeholder groups for each broad-level code from the coding manual. Comparisons were made at the stakeholder group level (all three stakeholder groups) to assess differences at the broadest level of analysis using the Mann-Whitney test. Because I was conducting multiple tests, I adjusted the alpha level to minimize Type I errors using the traditional Bonferroni correction (e.g., Jaccard & Guilamo-Ramos, 2002), which entails dividing the comparison alpha (0.05) by the number of outcome variables (in this case, three) and then using this as the critical alpha level for each univariate analysis (in this case, .017). See Table 5 for a summary of results.

**Child themes.** It was hypothesized that parents would discuss child themes more than administrators and providers. Accordingly three separate analyses were conducted to test these three pairwise comparisons. One of the three test comparisons yielded a statistically significant finding: providers had higher mean frequencies than administrators for child themes, $U = 4.50, z = -3.09, p = .001, r = -.73$. The final comparisons were not statistically significant: parents-providers, $U = 6.00, z = -1.64, p = .10, r = -.44$; parents-administrators for child themes, $U = 0.00,
that is, no difference was found in child theme mean frequency between parents and providers or parents and administrators.

**Family themes.** It was hypothesized that parents would raise more family themes more than administrators and providers. Accordingly three separate analyses were conducted to test these three pairwise comparisons. All three test comparisons did not yield statistically significant findings: parents-administrators, \( U = 0.00, z = -2.41, p = .02, r = -.76 \); parents-providers, \( U = 2.00, z = -2.26, p = .02, r = -.60 \); and providers-administrators, \( U = 13.50, z = -2.27, p = .02, r = -.54 \) for family-related themes.

**Community themes.** There were no stated hypotheses for community-level themes; thus, three exploratory Mann-Whitney tests were conducted to examine differences across all three groups; an adjusted significance value \( p = .016 \) was used for all tests. All three comparisons yielded non-significant results: administrators-parents: \( U = 9.00, z = -.36, p = .72, r = -.11 \); parents-providers: \( U = 12.00, z = -.78, p = .44, r = -.21 \); administrators-providers: \( U = 33.50, z = -.50, p = .62, r = -.12 \).

**Provider themes.** There were no stated hypotheses for provider-level themes; thus, three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value \( p = .017 \) was used for all tests. Only one of the three tests yielded a statistically significant finding: providers had higher mean frequencies than administrators for provider-level themes, \( U = 10.00, z = -.259, p = .01, r = -.61 \). The other two comparisons were not statistically significant: administrators-parents, \( U = 1.00, z = -2.19, p = .03, r = -.69 \) and parents-providers, \( U = 9.00, z = -1.17, p = .24, r = -.31 \).

**Intervention themes.** There were no stated hypotheses for intervention-level themes; thus, three exploratory Mann-Whitney tests were conducted to explore differences across all groups; an adjusted significance value to \( p = .016 \) was used for all tests. Only one of the three
tests yielded a statistically significant finding: parents had higher mean frequencies than administrators, $U = 0.00$, $z = -2.40$, $p = .016$, $r = -.76$. The other two comparisons were not statistically significant: parents and providers, $U = 6.50$, $z = -1.56$, $p = .12$, $r = -.42$ and administrators and providers, $U = 17.50$, $z = -1.91$, $p = .06$, $r = -.45$.

**Organizational themes.** There were no stated hypotheses for provider-level themes; thus, three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value of $p=.016$ was used for all tests. All three comparisons yielded statistically non-significant results: administrators-parents, $U = 2.50$, $z = -1.85$, $p = .06$, $r = -.59$; parents-providers, $U = 4.50$, $z = -1.89$, $p = .06$, $r = -.51$; administrators-providers, $U = 37.50$, $z = -.09$, $p = .93$, $r = -.02$.

**System themes.** It was hypothesized that administrators would discuss system-level matters more than providers and parents. Accordingly, three separate analyses were conducted to test these comparisons; an adjusted significance value to $p=.016$ was used for all tests. The three comparisons were not statistically significant: administrators did not differ significantly from providers, $U = 20.00$, $z = -1.68$, $p = 0.09$, $r = -.40$; administrators-parents, $U = 4.00$, $z = -1.48$, $p = 0.14$, $r = -.46$; parents-providers, $U = 16.00$, $z = -.08$, $p = 0.94$, $r = -0.21$.  

59
Table 5.

*Mann-Whitney results summary table (mean ranks and p-values) for 3 comparisons of theoretical groupings.*

<table>
<thead>
<tr>
<th></th>
<th>Admin-Provider</th>
<th>Provider-Parent</th>
<th>Admin-Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child</td>
<td>(4.00, 9.00), $p = .001$</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Family</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Community</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Provider</td>
<td>(5.43, 12.09), $p = .01$</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Intervention</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Organization</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>System</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
</tbody>
</table>

**Cluster analyses**

Although I assumed that each member of the different stakeholder groups would be most similar to others in the same stakeholder group, it seemed prudent to test that assumption. To do that, I used the cluster analysis method in nVivo 9.0. In this section, I present a cluster analysis of units by themes and groups with aims of visually understanding two things: (a) how similarly coded were the MHSE model factors and (b) how similar were stakeholder groups to each other according to factors. A cluster analysis is an exploratory technique used to visualize patterns by grouping sources (i.e., themes such as client-level or family-level factors and stakeholder group type) that share similar coded themes. The cluster analysis generates a dendrogram that clusters selected sources together if they are similar on selected characteristics. Specifically, hierarchical cluster analysis was used, combining themes across groups (e.g., parent, provider, administrator) based on co-occurrences of cases/themes (e.g., frequency of client, family themes). The Pearson correlation coefficient was used as a measure of similarity. Each theme was coded as either “present” or “absent” (1,0) for each stakeholder group.

Figure 2 represents how similarly coded the units are with respect to every other theme represented and Table 6 represents the Pearson correlations for stakeholder group by coding.
similarity. For example, the units that were coded as having a system theme were also most often coded as having family and provider themes. Family themes, however, were more similar to provider themes as well. Child-level factors were most often coded with community-level factors and intervention with organizational-level factors. According to the figure, system-level and organizational-level factors were the least often co-occurring codes for the same units. See Figure 2.

Figure 2 represents how similarly coded the units are with respect to stakeholder groups. In other words, this depiction answers the question: which groups had the most similar patterns of themes? The results indicated that the administrator focus group was independent of all other groups. There were two other groups that clustered together: the first included Parent 1, Parent 3, and Provider 1 whereas the second included Parent 2 and Provider 2 groups; see Figure 2.

*Figure 2. Stakeholder Groups Clustered by Coding Similarity*
Table 6.

Pearson Correlation Table for Stakeholder Group by Word Similarity

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parent Interview 1</td>
<td>---</td>
<td>0.35</td>
<td>0.34</td>
<td>0.41</td>
<td>0.30</td>
<td>0.037</td>
</tr>
<tr>
<td>2. Parent Interview 2</td>
<td>0.35</td>
<td>---</td>
<td>0.42</td>
<td>0.51</td>
<td>0.35</td>
<td>0.51</td>
</tr>
<tr>
<td>3. Parent Interview 3</td>
<td>0.34</td>
<td>0.42</td>
<td>---</td>
<td>0.48</td>
<td>0.35</td>
<td>0.45</td>
</tr>
<tr>
<td>4. Provider Focus Group 1</td>
<td>0.41</td>
<td>0.51</td>
<td>0.48</td>
<td>---</td>
<td>0.61</td>
<td>0.77</td>
</tr>
<tr>
<td>5. Provider Focus Group 2</td>
<td>0.30</td>
<td>0.35</td>
<td>0.35</td>
<td>0.61</td>
<td>---</td>
<td>0.53</td>
</tr>
<tr>
<td>6. Administrator Focus Group</td>
<td>0.37</td>
<td>0.51</td>
<td>0.45</td>
<td>0.77</td>
<td>0.53</td>
<td>---</td>
</tr>
</tbody>
</table>

Post Hoc Analyses

Given these results suggesting that the *a priori* groupings may not have been valid for these participants, I reran group difference tests using the new groups. That is, I compared three groups: administrators, parent-provider group 1, and parent-provider group 2. See Table 7 for a summary of results.

**Child themes.** Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value of $p=.016$ was used for all tests. Only two of the three tests yielded significant findings: parent-provider group 1 had higher mean frequencies than administrators, $U = 4.50, z = -2.87, p = .002, r = -.72$; parent-provider group 2 had higher mean frequencies than administrators, $U = 0.00, z = -2.85, p = .003, r = -.82$. The third test was not statistically significant: parent-provider group 1 and parent-provider group 2, $U = 8.00, z = -1.93, p = .06, r = -.52$.

**Family themes.** Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value $p=.016$ was used for all tests. Only one of the three tests yielded significant findings: parent-provider group 2 had higher mean frequencies than administrators, $U = 1.00, z = -2.69, p = .005, r = -.78$. The other two comparisons yielded non-significant results: administrators - parent-provider group 1, $U = 12.50,$
Community themes. Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value p=.016 was used for all tests. Only one of the three tests yielded significant findings: parents-provider group 2 had higher mean frequencies than parents-provider group 1, \( U = 5.50, z = -2.53, p = .007, r = -.68 \). The other two comparisons yielded non-significant results: administrators – parent-provider group 1, \( U = 18.50, z = -1.60, p = .17, r = -.40 \); administrators - parent-provider group 2, \( U = 8.00, z = -1.60, p = .12, r = -.46 \).

Provider themes. Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value p=.016 was used for all tests. Only one of the three tests yielded significant findings: parent-provider group 2 had higher mean frequencies than administrators, \( U = 1.00, z = -2.70, p = .005, r = -.78 \). The other two comparisons yielded non-significant results: administrators – parent-provider group 1, \( U = 10.00, z = -2.29, p = .02, r = -.57 \); parent-provider group 1 – parent-provider group 2, \( U = 8.00, z = -1.94, p = .06, r = -.52 \).

Intervention themes. Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value p=.016 was used for all tests. Only one of the three tests yielded significant findings: parent-provider group 2 had higher mean frequencies than administrators, \( U = 0.00, z = -2.85, p = .003, r = -.82 \). The other two comparisons yielded non-significant results: administrators – parent-provider group1, \( U = 17.50, z = -1.49, p = .15, r = -.37 \); parent-provider group 1 – parent-provider group 2, \( U = 7.00, z = -2.07, p = .04, r = -.55 \).
Organizational themes. Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value $p=.016$ was used for all tests. All three comparisons yielded statistically non-significant results: administrators – parent-provider group 1, $U = 31.50, z = 0.00, p = 1.00, r = 0.00$; administrators – parent-provider group 2, $U = 8.50, z = -1.48, p = .15, r = -.43$; parent-provider group 1 – parent-provider group 2, $U = 10.50, z = -1.62, p = .11, r = -.43$.

System themes. Three exploratory Mann-Whitney tests were conducted to explore differences across all three groups; an adjusted significance value $p=.016$ was used for all tests. All three comparisons yielded statistically non-significant results: administrators – parent-provider group 1, $U = 10.50, z = -2.23, p = .03, r = -.56$; administrator – parent-provider group 2, $U = 13.50, z = -.65, p = .56, r = -.19$; parent-provider group 1 – parent-provider group 2, $U = 13.00, z = -1.28, p = .24, r = -.34$. 
Table 7.

Mann-Whitney results summary table (mean ranks and p-values) for 3 comparisons of post-hoc groupings.

<table>
<thead>
<tr>
<th></th>
<th>Admin – Parent-Provider 1</th>
<th>Admin – Parent-Provider 2</th>
<th>Parent-Provider 1 – Parent-Provider 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child</td>
<td>(4.64, 11.50), p = .002</td>
<td>(4.00, 10.00), p = .003</td>
<td>ns</td>
</tr>
<tr>
<td>Family</td>
<td>ns</td>
<td>(4.14, 9.80), p = .005</td>
<td>ns</td>
</tr>
<tr>
<td>Community</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Provider</td>
<td>ns</td>
<td>(4.14, 9.80), p = .005</td>
<td>ns</td>
</tr>
<tr>
<td>Intervention</td>
<td>ns</td>
<td>(4.00, 10.00), p = .003</td>
<td>ns</td>
</tr>
<tr>
<td>Organization</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>System</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
</tbody>
</table>

Discussion

This paper presents the results of a focus group interview study designed to provide an understanding of stakeholder views on mental health services for children and families in a single locality in central Virginia. Both qualitative and quantitative approaches were used to analyze the focus group data. Specifically, three different stakeholder groups were sampled: parent, provider, and administrator. The Mental Health Systems Ecological (MHSE) model (Schoenwald & Hoagwood, 2001; Southam-Gerow, Rodríguez, Chorpita, & Daleiden, 2012) guided analysis of the qualitative data. The study had three primary findings: First, all stakeholder groups discussed topics relevant to each of the seven major domains of the MHSE model themes, suggesting that all three stakeholder groups are aware of the multiple levels of the ecology, which may influence mental health services for children and adolescents. Second, differences emerged between groups with regard to the frequency that different themes were discussed by stakeholders. Specifically: (a) providers were more likely than administrators to discuss child-level themes, (b) providers more frequently discussed provider-level themes than administrators, (c) parents were more likely to discuss intervention-level themes than
administrators, and (d) although frequencies for system-level themes did not significantly differ for any one group, administrators were more likely to discuss system-level themes than parents or providers. Third, cluster analysis revealed that in general administrators were significantly different from mixed groupings of parents-providers.

All stakeholder groups mentioned themes from the MHSE model. As an example of the multidimensionality endorsed, administrators discussed client (e.g., “These are kids who have multiple co-occurring disorders and distress and pathology.”), family (e.g., “but there’s a different level of service available for them versus a family that has the resources, has a car and can get here and see the psychiatrist here.”), community (e.g., “And then just a rapidly growing community.”), provider (e.g., “we have incredible trouble recruiting staff who have behavioral and cognitive-behavioral expertise already in hand.”), intervention (e.g., “in order for us to treat them [severely troubled kids] effectively we often do need to use other environments, including inpatient environments”), organization (e.g., “I think the obvious, unobvious; factor would be resources to meet needs.”), and system (e.g., “again, systemically we’re dealing with some issues in pursuing day treatment with schools.”) themes. Similar diversity of themes occurred across the transcripts of the provider and parent interviews (see Appendix B for unit examples), with endorsement of all seven levels of the MHSE model. Given the consistent perceptions across all stakeholder groups that mental health services encompass several layers of complexity, efforts to disseminate EBTs to a setting like this may need to consider the broad ecology. Approaches such as the Deployment-Focused Model (DFM; Weisz, McLeod, & Jensen, 2004) or implementation framework described by Fixsen and colleagues (Fixsen, Blasé, Naoum, & Wallace, 2009) offer strong starting points, given their consideration of the multi-level factors involved in mental health services.
A consideration of a few specific examples of common themes will help to illustrate potential future directions based on these findings. Stakeholder comments underscored their perceptions of the importance of system cooperation (e.g., school and clinic). This finding suggests the possible utility of approaches that emphasize on systems of care (Stroul & Friedman, 1994). For example, wraparound services (Bruns et al., 2011) are based on the premise of team collaboration across systems of care to develop and implement individualized service and support plans to youth with serious behavioral and/or emotional problems and their families. Another common theme across stakeholder groups was the complex nature of the client difficulties, including multiple, co-occurring mental health diagnoses. The theme suggests the possible usefulness of treatment models that permit focus on multiple treatment targets, such as the modular approach (Chorpita & Daleiden, 2009) or the unified model described by Ehrenreich (Barlow et al., 2004; Ehrenreich et al., 2009).

The second main finding was that stakeholder groups differed in terms of the quantity of their discussion of specific themes. These differences were most notably apparent for child, family, provider, and intervention-level themes detailed below. Providers discussed child-related themes more than administrators. Providers focus on child symptoms and discussed them differently than other groups. For example, parents discussed types of symptoms they experience with their own children and listed how these symptoms presented behaviorally or emotionally, such as this parent who noted, “[step son’s] got a lot of anger for the things she [his mother] did…or he [step son] comes home and wants to fight with everybody…because he’s [step son is] angry about something that happened over there.” Despite this similarity with child themes, providers emphasized client complexity and severity (“I’m dealing with substance abuse as well as other issues…dually diagnosed kids is probably the norm rather than the exception”),
whereas parents emphasized child symptoms in context of their own children’s behaviors and emotions (“and not having a father in his life he [child] was depressed”).

Further, although providers were not significantly different from administrators, they similarly cited child symptoms, abilities, and experiences most frequently. For example, a provider noted, “Another topic, we get are the high functioning mentally retarded kids with the behavioral problems as well.” Instances in which administrators did discuss child-level themes, they also focused on child symptoms (e.g., “These are kids who have multiple co-occurring disorders and distress and pathology.”).

Taken together, these findings are not surprising because each stakeholder focused on what is primarily relevant to his/her role within the mental health system. In other words, parents and providers interact with children on a daily basis, so it is anticipated that they would more frequently discuss child-related themes. In contrast, the role of administrators is to manage organization and/or system-level issues and not to work directly with children and their families, so their minimal discussion on child related themes is predictable. The question then becomes how to use this information to inform treatment development.

Given that parents and providers discussed many aspects of child and family themes (e.g., symptoms, behaviors, perceptions, abilities); models of treatment that go beyond traditional mental health services (e.g., addressing child symptomatology) and integrate other relevant aspects related to child functioning (e.g., child anger, single family households, other family stressors) may be warranted. One ideal approach is wraparound services, which aims to address children’s mental health needs through individualized community-based services focused on family needs and strengths (e.g., Bruns, Sather, Pullman, & Stambaugh, 2011; Nordness, 2005). Recent efforts demonstrate substantial widespread wraparound implementation in the United States (Bruns et al. 2011).
Overall, it seems that parents and providers viewed client themes similarly. As described earlier, it could be due to “proximity of importance” for parents and providers. That is, parents and providers interact with the individual child (and the associated child themes) regularly and families are undeniably an integral component of the child, so it is not surprising that foci were similar for both stakeholder groups. On the other hand, other more “distant” themes may not be perceived by parents/providers important, such as system themes, which may be more relevant for administrators.

Providers discussed **provider-level themes** more frequently than administrators. Specifically, providers discussed the importance of provider behaviors (e.g., “we have to go into schools and say this kid isn’t really conduct disordered, they have a lot of anxiety….and that’s part of their disability”) and provider attitudes about evidence-based treatments (e.g., “…and it’s just the same old little playschool stuff and I need something more advanced, but it’s not out there, and always looking for new knowledge and new training, and feedback, and collaboration,” and “And I’m feeling like I need new tools in my toolbox.”). Research suggests that few providers have access to research findings and/or know how to integrate and apply the literature (Kirk & Reid, 2002). Perhaps identifying ways to improve therapist accessibility for EBTs, ways to support providers learn EBTs, and apply them to complex cases may be important for enhancing implementation efforts. Although studies have examined factors contributing to improvement of EBT appeal (e.g., Aarons, 2005), few have examined effective ways to facilitate this change. Though access to scientific journals may be limited by providers, training in EBTs is available. Despite the sparse literature and limited clarity on what the best methods for training could be, a few strategies are promising. A review of the training literature by Herschell and colleagues demonstrated that although having the therapists interact independently with training materials may be a necessary first step (e.g., reading treatment manual, computer,
videotaped review), it is likely not sufficient for acquiring many of the skills needed to deliver treatments proficiently. The conclusions from this review highlighted the need for a multi-component approach (e.g., manual, intensive workshop training, expert consultation, live or taped review of client sessions, supervisor training, booster training sessions) to produce superior training outcomes (Herschell, Kolko, Bauman, & Davis, 2010).

Somewhat surprisingly, parents were more focused on intervention-level themes than administrators, while providers were not, conflicting with the assumption that proximity of function would prevail and that providers would more frequently discuss intervention themes. Related to interventions, parents mainly discussed type/modality of intervention. For example, one parent noted: “I would like for her [daughter] to be in an anger management group…I would say group because then, I would say group because then she’s seeing other children who are going through the same thing…I would think with individual therapy and the group thing that would help feeling unaware of medication side effects and their mistrust of psychiatrists and related professionals.” It is notable that parents discussed intervention topics at greater frequency than administrators (and most importantly, providers) and suggests that parents at this agency possessed an interest in and/or knowledge of interventions being used at the agency with their children. Keeping parents involved in and aware of their child’s therapy has been linked to an increase in accuracy of parental treatment expectations (Shuman & Shapiro, 2002), which may influence satisfaction with treatment or session attendance.

Lastly, system-level theme differences were not statistically significant among stakeholder groups; inconsistent with the assumed “importance proximity.” However, what is interesting is that compared to other themes, administrators discussed this theme at a much higher rate. In particular, they focused on multisystem involvement (e.g., “…the fundamental business of each of those areas [schools and agencies] tends to be mostly within.” [reference to
limited collaboration between “areas”]. Given that clinical administrators are primarily responsible for managing clinical services (e.g., direct care, supervision, clinical support) and administrative functions (e.g., governance and planning, policy, financing; see Southam-Gerow et al., 2012), it is not surprising that clinic administrators spent most of their time discussing system-level issues. What is surprising, and perhaps encouraging, is that other stakeholders also recognized and discussed the importance of multisystem involvement issues in children’s mental health care. There was, however, a qualitative difference in how the groups discussed these issues. That is, administrators discussed the broader scope of system-level themes, such as funding for research and clinics (“Well there are some promising models though. Some funders, at least on the prevention side, a contingency of funding is to demonstrate collaboration. So in other words, if you want the grant money, if you don’t have those letters of agreement from other agencies that are involved or key players, you don’t have a chance at getting the money.”), whereas parents and providers focused on multisystem involvement from educational or treatment system perspective (“Do a lot of work with schools attending the IEP’s and those types of programs trying to get resources for what the kids need in school as well as home” or “We’ve had some court buy-in as far as ordering parents, recognizing the importance of systems work, but you can’t make parents come in here either.”). Despite this qualitative difference, it is clear that parents, providers, and administrators all discussed the importance of a coordinated system of care for children’s mental health.

Such a system of care has been a topic of much discussion (and controversy) in the literature. Briefly, as described by Stroul et al. (2008), a systems of care approach to children’s mental health services is a range of services and supports, guided by philosophy, and supported by an infrastructure that should be driven by the needs and preferences of children and families. Management of these services should be a collaborative effort within multi-agencies, services
should be responsive to cultural context characteristics of populations served, and families should be lead partners in planning and implementing the system of care. An important component of a system of care is its ability to integrate and coordinate services across the multiple systems (i.e., mental health, health, juvenile justice, child welfare). The idea in concept is widely accepted (Stroul et al., 1997; Kutash, Greenbaum, Wang, Boothroyd, & Friedman, 2011). In practice, however, the evidence on a system of care approach has been somewhat discouraging. For example, Bickman and colleagues compared the quality, use, outcome, and cost of the continuum of care model (i.e., comprehensive and coordinated range of services with a community-based treatment emphasis) to more restrictive forms of care (e.g., hospitalization) and found that continuum of care had no better effect on clinical outcomes than traditional services (Bickman, Heflinger, Lambert, & Summerfelt, 1996). Evidence has been more promising with wraparound services—according to a national survey study of wraparound service implementation, there has been an increase in state evaluation of wraparound services (31% in 1998 to 75% in 2008), an increase in number of agency involvement, and greater diversity of child-serving systems (e.g., child welfare, juvenile justice, and education) (Bruns et al., 2011).

A final finding was that the cluster analyses suggested that stakeholder groups did not hold together in the same way as designed. Specifically, administrators were significantly different from two separate parent-provider groups. That is, parents and providers did not cluster together in separate groups, but were instead clustered into two mixed groups. When we re-analyzed our data based on these “new” groupings, several findings were revealed. First, as would be expected, administrators differed significantly from the two groups consisting of providers and parents. Considering the parent-provider groups, the primary difference between them was that one discussed the Community theme more frequently. The cluster analyses
suggest that parents and providers express similar views about mental health services compared to administrators.

**Study Limitations & Future Directions**

Despite the public health importance of the study and its many methodological strengths (e.g., consensus coding), the study also had some limitations. First, there were a small number of participants in the parent interviews. Although the provider and administrator groups contained nearly the entire population of interest, the parent interviews included only three parents, making it unlikely that saturation was attained. Future research would benefit from increasing the number of parent participants in a study like this. Sample size for the present study was likely to difficulty recruiting parent participants. Future work could implement multiple strategies to recruit parents more effectively. For example, providing free workshops to parents about generic topics (e.g., managing parent stress) at the clinic and consequently inviting them to participate in focus groups may be a useful approach. Additionally, providing child care, transportation, and monetary compensation would be important as well (e.g., Ingoldsby, 2010).

Second, the use of the MHSE model as primary reference for the development of a coding manual has limitations. It is possible that because of this, the coders failed to capture alternative themes relevant to the goal of identifying stakeholder group perspectives on children’s mental health services. Restricted themes limit the potential for alternative themes to emerge. Similarly, personal bias, preexisting opinions, or expertise about topics or themes being discussed may lead coders to find evidence confirming hunches and thus lead to faulty interpretations of the data. Despite these limitations, two advantages are made clear: (a) the rigor of testing the MHSE model was the aim of the study and thus the focus of inquiry (vs. emerging themes) and (b) coder experience and expertise in dissemination and implementation science is
advantageous in the conceptualization and development of codes for qualitative data and interpretation of results that would otherwise be missed by a less experienced coder.

Further, it is possible that in attempts to reach consensus between two coders, one coder dominated consensus coding given the differential in coder seniority status (faculty and graduate student-level). One way to safeguard against this would be to identify coders with similar credentials and/or seniority status. Future studies utilizing a coding manual approach to coding should consider integrating multiple coders of similar credentials to pilot test the validity of the manual.

Moreover, since data were collected in 2005 (seven years ago), relevance of results may be questioned. Certainly, changes in mental health policy and professional education may have influenced mental health stakeholder perceptions since these interviews were held; however, the perceptions collected remain important insofar as they represent a survey of the thoughts of a wide array of stakeholders in a public mental health system. The research-practice gap was and remains a major public health problem (e.g., McHugh & Barlow, 2012; Southam-Gerow, Rodríguez, Chorpita, & Daleiden, 2012). Consequently, dissemination and implementation science remains a high national priority, as indicated by comments from the director of the National Institute of Mental Health (NIMH) in the United States: “translational research will focus not only on ‘bench to bedside,’ but also on ‘bedside to practice’ as the institute focuses on increasing its public health impact, addressing disparities in mental health care, and reducing the burden of mental illness” (Insel, 2009, p.132). To the extent that these results can be used in the effort to close the gap, they remain useful and pertinent.

Finally, the fact that the cluster analysis resulted in different groupings than expected may be unique to this particular sample; the finding of the novel clustering needs to be replicated.
Conclusion

Despite these limitations, this study provides some validation that stakeholder perceptions on mental health services for children are influenced by the multiple levels, as described by the MHSE model. Although all three stakeholder groups identified themes across most of the seven levels of the model, parents and providers focused most on child/family themes, providers focused more on provider themes, and parents on intervention themes. These findings allow us to highlight several themes in treatment development and implementation. Parent focus on child/family themes suggests that we may need to consider alternate strategies/models to treatment development that handle child/family complexity; provider focus on provider themes suggests that provider treatment knowledge/attitude is important to understand prior to beginning dissemination of treatments; and parent focus on intervention types suggests the importance of helping parents understand their children’s treatment. Most notably, the partnership approach served as the medium to engage and integrate stakeholders from this community clinic and allowed for gathering insight to further inform treatment development and dissemination. Accordingly, these findings demonstrate that development and testing of child/adolescent EBTs will require a focus across multiple levels of the mental health system ecology to maximize public health impact.
List of References


80


### Appendix A
**Code Definitions**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHILD</strong></td>
<td></td>
</tr>
<tr>
<td>Child symptoms (e.g., problem area, severity, diagnosis)</td>
<td>Child abilities (e.g., insight, age, resiliency)</td>
</tr>
<tr>
<td><strong>FAMILY (including parents, siblings, and other family members)</strong></td>
<td></td>
</tr>
<tr>
<td>Family abilities (e.g., capacity of family to change, insight/understanding of family)</td>
<td>Family attitudes/perceptions (e.g., blame child/therapist, cooperation, hopeful)</td>
</tr>
<tr>
<td><strong>COMMUNITY</strong></td>
<td></td>
</tr>
<tr>
<td>Gang affiliation influences</td>
<td>Drug environment influences</td>
</tr>
<tr>
<td><strong>PROVIDER</strong></td>
<td></td>
</tr>
<tr>
<td>Actions and behaviors of providers (e.g., alliance building behaviors, providing additional support to family, calling the child client’s school to problem solve an issue)</td>
<td>Provider attitudes/perceptions (e.g., blaming the parent for child problems, preference of problem area, attitudes/perceptions about evidence-based treatments)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>INTERVENTION</td>
<td>Delivery setting of the intervention (e.g., home, school, hospital)</td>
</tr>
<tr>
<td>Intervention type or modality (e.g., medications, CBT, extra-therapeutic activities such as Karate, alternate approaches, specific treatment models)</td>
<td></td>
</tr>
<tr>
<td>ORGANIZATIONAL</td>
<td>Policies/structure, including the organization’s hierarchy and its procedures pertaining to chains of command, policies affecting personnel (e.g.,)</td>
</tr>
<tr>
<td>SYSTEM</td>
<td>Financing/payment methods (e.g., fees, funding, insurance, state policy),</td>
</tr>
</tbody>
</table>
### Appendix B
Exemplar Themes

<table>
<thead>
<tr>
<th>CHILD</th>
<th>PARENT</th>
<th>PROVIDER</th>
<th>ADMINISTRATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “And I know a lot of children that are ADHD are misdiagnosed as ADHD when they are really bipolar, but I see more ADHD in her than I do anything. I really do” (symptoms)</td>
<td>• “You know just, a female client was getting involved with older men, not really caring about that you know wasn’t thinking through the possible consequences and a ‘I don’t care’ attitude” (attitudes/perceptions)</td>
<td>“If we had this trillion dollars available, I think the thing that troubles us the most in our comprehensive system for dealing with kids who have problems, way out on the far end of the spectrum are a small group of kids, but still very troublesome group of kids, who really have extreme pathology” (symptoms)</td>
<td></td>
</tr>
<tr>
<td>• “I have to give that some thought, we been coming here so long, the first problem when we first started coming here was attention deficit hyperactivity disorder…” (symptoms)</td>
<td>• “I think that’s huge. Just to piggy back on that is I think sometimes the kids think they’re the problem realistically they’re not going to feel like they’re going to be a part of the solution. You know?” (attitudes/perceptions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• “I think a lot of it has to do with the fact that they [youth] are dealing with stuff that they don’t know how to say, ‘can you help me?’” (abilities)</td>
<td>• “…she is so resistant to...”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• “So many people are in denial, I see people all around me, they feel like because it’s the way they think it’s okay. And they’re so fogged in left field, right field, somebody’s field. You know. Is there any way? We’ve got to come up with something to help them feel.” (abilities)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

92
anything. I know services they offer but she’s not there yet….why won’t she open up? Again, it has to do I believe with the mood disorder. She doesn’t feel she has problems.” (attitudes/perceptions)

<table>
<thead>
<tr>
<th>FAMILY</th>
<th>PARENT</th>
<th>PROVIDER</th>
<th>ADMINISTRATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “As a professional woman, I feel she [psychiatrist] shouldn’t have said it around you [her son]. But for her to say that around you? Because I’m asking her questions? ‘From looking at you, he will probably always be on medication.’ I wanted to smack her, I really did. A rage build up in me. And this is a professional psychiatrist. ‘Titles can’t tell me nothing at this point, I’m sorry.” (experiences)</td>
<td>• “The frustration for us is a lot of times we have parents who are just plain not willing to learn to do things in new ways. So, kids come out of the group home after having a great experience and fall flat on their faces again.” (behaviors/interactions)</td>
<td>“A lack of public transportation is a real obstacle not only for these services, but for a while range of them. So a family may have needs, but may not be able to get around…but there’s a different level of service available for them versus a family that has the resources, has a car, and can get here and see the psychiatrist here.” (situations)</td>
<td></td>
</tr>
<tr>
<td>• “I think that if you did a survey, you’d find out that probably, I’ll guess, 80% of those children that are in that much trouble are in single parent homes…and I’ll guarantee you of that 80%, 70% of that, is living with the mom, who’s working two jobs.” (situations)</td>
<td>• “If mom’s not on board with doing all the things she needs to do to take care of herself, then all of the kids will crumble like dominoes, and that’s what I’ll see…” (symptoms)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNITY</th>
<th>PARENT</th>
<th>PROVIDER</th>
<th>ADMINISTRATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROVIDER</td>
<td>PARENT</td>
<td>ADMINISTRATOR</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>“I am not really familiar with gangs and stuff like that but I guess it really happens at school.” (gang affiliation)</td>
<td></td>
<td>“If we’re in the ideal world, I think moving away from the concept of hospitalization to a whole other model of supportive communities.” (other)</td>
<td></td>
</tr>
<tr>
<td>“And we’re seeing a somewhat increase, especially in Chesterfield county of gang or gang-like behavior. Or want to be affiliated with gangs, or gang-like groups as a way of like acting out and fitting in and acting out. There are certain schools and certain areas where that seems to be a lot more prevalent.” (gang affiliation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Everyone is different in what they think; even the professionals themselves…and even doctors and different therapist think different things.” (specialty)</td>
<td>“I think most of us here visit clients, clients now and then or frequently depends, at the detention home or the group home, where a lot of them with conduct disorder, end up there quite frequently, especially detention, and it’s just not unusual to have them there a lot and they just eventually get to where they don’t care about being there, it’s just not a big deal…” (actions/behaviors)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>“And I’m feeling like I need new tools in my toolbox. And it’s just the same old little playschool stuff and I need something more advanced, but it’s [more advanced treatment tools] not out there, and always looking for new knowledge and new training, and feedback and collaboration.” (experiences)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

94
<table>
<thead>
<tr>
<th>INTERVENTION</th>
<th>PARENT</th>
<th>PROVIDER</th>
<th>ADMINISTRATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>”I would like for her [daughter] to be in an anger management group… I would say group because then, I would say group because then she’s seeing other children who are going through the same thing… I would think with individual therapy and the group thing that would help feeling unaware of medication side effects and their mistrust of psychiatrists and related professionals.”</strong> (type/modality)</td>
<td><strong>”Highlighting strengths within the family, and kids having special time… balance things and possibly getting family/parents involved in their own therapy if they need it.”</strong> (type/modality)</td>
<td><strong>”We have many, many concerns about the quality of those kinds of environments [inpatient, residential] and what happens to kids who have to leave home for some reason and get placed in whether it’s day treatment programs or inpatient programs or whatever.”</strong> (intensity level)</td>
<td></td>
</tr>
<tr>
<td><strong>”Early detection. To me, early detection is the best key. But the early intervention team came into our home to evaluate him [son], and did not see that [autism] in him. Anyways, some doctors other doctors you can’t believe it… he wanted my son to take tests they had to administer at his facility that no insurance would pay for.”</strong> (assessment triage)</td>
<td><strong>”They need residential treatment to be stabilized to the point where outpatient treatment can be effective”</strong> (intensity level)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>PARENT</th>
<th>PROVIDER</th>
<th>ADMINISTRATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>”I really wish they’d just call and say, and a lot of doctor’s</strong></td>
<td><strong>”And we therapists can’t always access play therapy or art”</strong></td>
<td><strong>”And I think if you talk about doing something that has fidelity,”</strong></td>
<td></td>
</tr>
</tbody>
</table>
offices do this [reminder call for appointment], you know. And there have been times when I’ve gotten her [daughter] out of school and got all the way up here and they were like, “oh, well, she’s not here today; she was sick.” They really need to call you and say, “hey,” you know, “she’ll call you and reschedule when she gets in, but she’s not here today.” You know? Those are the complaints or problems that I have.” (service attributes)

- “It would be nice if they had, like, some attendant that worked in that playroom. But even if they did it, it wouldn’t be during the hours that I can come.” (availability of resources)

- “The amount of services that we bring can bring to bear on a family from this agency is, is just, you know, a lot more than what you can do in private practice….Here [public vs. private practice] we are here, and so we have a lot of other things that we can offer, but that’s all we have… and there needs to be another avenue for these mental health kids in the court system too.” (availability of resources)

- “I think the obvious, unobvious factor would be resources to meet needs. A lot of these things, I think, when you tie it together to be able to have…for those staff that wouldn’t be trained, to obviously, to get them that kind of training to support them in those efforts and I think one of the realities we face is trying to meet the need as it comes in the door.” (availability of resources)

- “So we do the best we can, but we definitely are short on resources for that kind of systematic training in best practices that would be ideal. We’re not bad, but we’re not at that ideal by any means. That’s the way I see it.” (availability of resources)

- “Right, so I don’t know why the doctor told us that [son had autism], was it a money thing? Anyways, some doctors other doctors you can’t believe it…he wanted my son to take tests

- “Only if they have Medicaid are they going to get intensive in house…how many families don’t have Medicaid and the child’s at risk to be removed to the point where the family’s saying ‘I

- “…the fundamental business of each of those areas [schools and agencies] tends to be mostly within.” [referring to limited collaboration between “areas”] (multisystem involvement)
- “They get into trouble with the law, substance abuse, skipping school and it’s like this, it’s like self-fulfilling prophecy, you know.” (multisystem involvement)

- “And [teachers] make recommendations, they recommended them that he’s first out of middle school, maybe he could leave classes early cause they’re crowding and pushing, and my son not liking crowds, they recommended that instead of a combination lock, they started with a lock with a key…” (multisystem involvement)

- “So it’s going to be real important to try and also to trust what’s going on with the family as well as with other systems. I think it’d be real important that that child, whether it be school, be court, those types of things.” (multisystem involvement)

- “Now at drug courts we have more control over some things because it’s the courts. We have actually had some kids come out and go different places, go live with their uncles, something like that because when they come out their families are still not you know, their parents in jail at that point for example using, or

- “I remember years ago digging deeply into treatment for depression. I was doing a training on it and went through the American Psychiatric Association’s guidelines, and also the American Psychological Association’s guidelines. And it was interesting they were talking about the same issue, but one had the algorithms for medication treatments, and the other had the cognitive-behavioral and interpersonal therapy pieces and medication was referenced a little bit but they were very different world views that were influenced by the professions.” (spread of research)

- “The concern is, is how that plays out is I think a situation that we’re kind of dealing with right now with finding where researchers, I believe, can tout the effectiveness model and excite potential users of that model and excite funders of that model, and when the model is tested with perhaps more of a limited populations.” (spread of research)
actively using drugs at that point so we can’t send them home so we’ve had to do that kind thing too.” (multisystem involvement)

- “And then they [adolescents who are constantly in court, in trouble, refusing treatment] get older and then we have a problem with transitioning them into the other units because the services are different, and you would think that there would be more services for them, but there aren’t. There aren’t.” (access)
Adriana Rodríguez was born on May 12, 1986 in Orange County, California and is an American citizen. She graduated from Santiago High School, Garden Grove, California in 2004. She received her Bachelor of Arts in Psychology and minor in Ethnic Studies from the University of California, Berkeley in 2008 and subsequently worked as a research assistant at the University of California, Los Angeles for two years. Adriana is currently in her second year in the Clinical Psychology Doctoral Program at Virginia Commonwealth University.