

UC San Diego

UC San Diego Previously Published Works

Title

Observed Engagement in Community Implemented Evidence-Based Practices for Children and Adolescents: Implications for Practice Delivery

Permalink

<https://escholarship.org/uc/item/7mk2z5zc>

Journal

Journal of Clinical Child & Adolescent Psychology, 52(4)

ISSN

1537-4416

Authors

Wright, Blanche
Brookman-Frazee, Lauren
Kim, Joanna J
[et al.](#)

Publication Date

2023-07-04

DOI

10.1080/15374416.2021.1955366

Peer reviewed



Published in final edited form as:

J Clin Child Adolesc Psychol. ; : 1–15. doi:10.1080/15374416.2021.1955366.

Observed Engagement in Community Implemented Evidence-Based Practices for Children and Adolescents: Implications for Practice Delivery

Blanche Wright, M.A.¹, Lauren Brookman-Frazee, Ph.D.^{2,4}, Joanna J. Kim, Ph.D.³, Resham Gellatly, Ph.D.¹, Mary Kuckertz, B.A.³, Anna S. Lau, Ph.D.¹

¹University of California, Los Angeles, Department of Psychology, Los Angeles, CA

²University of California San Diego, Department of Psychiatry, San Diego, CA

³Arizona State University, Department of Psychology, Tempe, AZ

⁴Child and Adolescent Services Research Center, San Diego, CA

Abstract

Objective: This observational study characterizes youth and caregiver behaviors that may pose challenges to engagement within a system-driven implementation of multiple evidence-based practices (EBPs). We examined links between Engagement Challenges and therapist EBP implementation outcomes.

Method: Community therapists (N=102) provided audio recordings of EBP sessions (N=666) for youth (N=267; 71.54%, Latinx; 51.69%, female; $M_{age}=9.85$, Range: 1–18). Observers rated the extent to which youth and/or caregivers engaged in the following behaviors: Caregiver and/or Youth Expressed Concerns about interventions, and Youth Disruptive Behaviors. Multilevel modeling was used to identify predictors of observable Engagement Challenges, and examine associations between Engagement Challenges, and therapist-reported ability to deliver planned activities, and observer-rated extensiveness of EBP strategy delivery.

Results: At least one Engagement Challenge was observed in 43.99% of sessions. Youth Engagement Challenges were not associated with outcomes. Caregiver Expressed Concerns were negatively associated with therapist-reported ability to carry out planned session activities ($B = -.21$, 95% CI[-.39(-.02)], $p<.05$). However, Caregiver Expressed Concerns were positively associated with extensiveness of EBP Content strategy delivery ($B = .08$, 95% CI[.01-.15], $p<.05$).

Conclusions: Results suggest that Youth Engagement Challenges have little observed impact on EBP delivery. In contrast, although therapists perceive that Caregiver Expressed Concerns derail their planned activities, Caregiver Expressed Concerns are associated with more extensive delivery of content about therapeutic interventions. Community therapists' implementation of EBPs appear unaffected by common youth in-session behavioral challenges, but future research

Correspondence concerning this article should be addressed to: Blanche Wright at bmwright2020@ucla.edu.

We have no known conflict of interest to disclose.

Data have been presented in previous conference presentations, one dissertation and publications.

is needed to clarify whether caregivers' concerns about interventions prompt, or are prompted by, more intensive therapist EBP content instruction.

Keywords

Engagement; evidence-based care; observational; community; implementation

Introduction

Policy-driven implementation of multiple evidence-based practices (EBPs) is becoming more common within efforts to improve the quality of care in publicly-funded mental health systems for children and adolescents (Rubin et al., 2016; Walker et al., 2019). Meta-analyses reveal that EBPs outperform usual clinical care in the community, but with attenuated effects compared to those observed in efficacy trials (Eckshtain et al., 2020; Weisz et al., 2006, 2013, 2017). In other studies, there is some evidence that EBPs have not outperformed usual care (Spielmanns et al., 2010). Theoretical models of engagement (e.g., Berkel, Mauricio, Schoenfelder, & Sandler, 2011) and previous research demonstrate that client engagement (e.g., attendance, participation in activities, attitudinal buy-in) is critical to achieving clinical improvements within EBP delivery (Chu & Kendall, 2004; Haine-Schlagel & Walsh, 2015; Ruiz, Korchmaros, Greene, & Hedges, 2011). However, client engagement is a well-documented challenge in community settings (Gopalan et al., 2010; Nock & Ferriter, 2005). Attrition rates, one common metric of client engagement, are higher in community care compared to randomized controlled trials. In fact, efficacy trials of Parent-Child Interaction Therapy, a parent-mediated EBP, show attrition rates up to 47% compared to 77% in community-based implementation (Budd & Lyon, 2010). Meta-analytic data confirm that dropout rates are higher in effectiveness versus efficacy trials overall (de Haan et al., 2013). Further, community therapists commonly report concerns about intervention fit with clients' background, and research supports engagement as a key reason for adapting EBPs (Jensen-Doss et al., 2009; Wiltsey Stirman et al., 2019). As EBPs are transported from clinical research to community contexts, variation in client engagement may account for some of this "voltage drop" in effectiveness. Within youth mental health care, the engagement of both youth and their primary caregivers (e.g., biological parent, foster parent) is essential for outcomes, as caregivers are key agents of behavioral change (Fawley-King et al., 2013; Wright et al., 2019).

Engagement Influenced by Multiple Factors

The term "engagement" refers to a range of client behaviors and attitudes and has commonly been operationalized by metrics including treatment initiation, participation, attendance, and adherence. Despite variable measurement of engagement in the literature, most scholars agree that client engagement includes both attitudinal (e.g., "buy-in") and behavioral components (e.g., in-session participation, attendance, compliance), which are inter-related and necessary for clients to receive the benefits of an intervention (Staudt, 2007). Indeed, engagement is not easily captured by any static measure of client's receptivity toward an intervention, but rather is a multidimensional and complex, dynamic process that unfolds over time (Bamberger et al., 2014).

As defined by the Staudt (2007) conceptual framework, engagement may be hindered by multiple factors such as access barriers, clients' skepticism about the intervention, daily life stressors and competing demands, and perceptions of the relevance or fit of the intervention for their situation. Research has consistently shown that client circumstances of social disadvantage and poverty are associated with poorer engagement in the form of lower rates of attendance, early termination, and homework compliance. (Chacko et al., 2016; Coatsworth et al., 2018). Suboptimal engagement observed in community-based services relative to controlled trials may be due in part to differences in these client characteristics that may also impact perceptions of the relevance and acceptability of treatment (Weisz et al., 2014). Children receiving community mental health services often have more severe symptomatology and comorbidities than youth participating in controlled trials (Southam-Gerow et al., 2008) and youth served in publicly-funded mental health systems tend to be from low-income and racial/ethnic minoritized backgrounds (Quetsch et al., 2020; Sibley et al., 2020; Southam-Gerow et al., 2008).

As EBPs are increasingly being disseminated in minoritized communities not well represented in clinical trials, attention to client receptivity and response to EBPs is crucial. Community implementation with efficacy trial level fidelity may not be achievable or appropriate when serving diverse clients in routine care settings. Yet, the inclusion of evidence-based strategies while attending to personalized client needs and preferences is an aspirational standard of quality of care for youth (Eslinger et al., 2020; Park, Tsai, Guan, & Chorpita, 2018). Identifying potential inequities in engagement by client demographic variables may inform targeted improvement efforts in community-based services. In particular, Latinx youth represent a growing demographic in public mental health services and have been found to have lower treatment utilization compared to non-Latinx youth (Mennies et al., 2020).

Beyond client factors, theory concerning the transactional nature of the therapy engagement process also highlights therapist characteristics and behaviors that impact client engagement behavior (Karver et al., 2005; Staudt, 2007). Just as clients must be active participants to benefit from EBPs, therapists background and experience are likely influential (Berkel et al., 2011; Mauricio et al., 2019; Staudt, 2007). Therapists' own cultural and racial identity may come into play in their attitudes and approach to EBP delivery within community settings serving minoritized clients (Saifan et al., 2018). Additionally, the working conditions within which therapists are providing services may also have an impact on engagement (Dixon et al., 2016; Staudt, 2007). For instance, high caseloads may be associated with greater emotional exhaustion (Kim et al., 2018) and portend poorer engagement outcomes (Gellatly et al., 2018). On the other hand, therapists with higher caseloads in EBP implementation contexts may have more experience and be more adept at fostering engagement. The limited existing data on therapist factors in client engagement warrants further investigation.

Measuring In-Session Engagement

In the research literature, session attendance has been the most common index of engagement (Becker et al., 2018), with much less research characterizing in-session engagement of clients. There are many terms used to refer to in-session engagement,

including “involvement,” “responsiveness” and “active participation,” with variable definitions across studies (Piotrowska et al., 2017). Moreover, extant conceptual and theoretical models of engagement are largely parent-focused, limiting our understanding of the interplay of youth in-session engagement and intervention implementation. A major question remains about the role of valence (i.e., “positive” or “negative”) in characterizing client participation in session. For example, Chu and Kendall (2004) characterized in-session child engagement by measuring “positive involvement” (e.g., self-disclosure; enthusiasm) and “negative involvement” (e.g., refusal to participate). However, in-session behaviors often labeled as “negative” may be construed as clients asserting their agency (Buckingham et al., 2016; Guan et al., 2019). Community therapists serving low-income and minoritized youth commonly raise concerns about client-intervention fit and note that clients may be apprehensive about structured elements of EBPs (Eslinger et al., 2020; Jensen-Doss et al., 2009; Rodriguez et al., 2018). Indeed, EBPs have typically been developed and tested within research settings and not community settings where clients hold diverse cultural identities and values and face a myriad of life circumstances that may influence perceptions of interventions and engagement-related behaviors. A client expressing concerns about the EBP may present a challenge for therapists to respond sensitively, as well as an opportunity to collaborate with a client who is showing a willingness to engage authentically (Becker et al., 2020; Guan et al., 2019).

Within a system-driven EBP implementation effort in children’s mental health, Lau and colleagues (2018) examined therapist reports of two categories of Engagement Challenges including “limited client engagement” (e.g., avoiding participation in therapy activities, or consistently veering off topic) and “expressed client concerns” (e.g., voicing concerns about the relevance or acceptability of the skills being taught). In two related studies, therapists were asked to retrospectively report on whether “limited client engagement” and “expressed client concerns” occurred with a specific client in the previous two months (Lau et al., 2018) and immediately following EBP sessions (Gellatly et al., 2018). Therapists were more likely to report instances of “limited client engagement” when they had smaller caseload size, when they were Non-Latinx White therapists, and when treating boys versus girls. Therapist reports of “limited client engagement” were related to decreased self-assessed ability to carry out session activities in both the session-level and bimonthly retrospective reports (Gellatly et al., 2018; Lau et al., 2018). Therapist-reported “expressed client concerns” were negatively correlated with self-assessed delivery of session activities only at the session-level (Gellatly et al., 2018). Such Engagement Challenges may interfere with delivering EBP sessions as planned, and may represent one factor contributing to diminished effects of EBPs in community implementation.

However, these studies examined therapist perceived client engagement challenges and their self-appraised success in delivering EBP session activities as planned. It is plausible that therapists may misattribute low engagement behaviors to client dispositional factors, with less attention to how intervention features, process, or therapeutic relationship factors may have transactionally shaped client engagement in the EBP. Client engagement is influenced by factors at multiple levels. It is possible that when therapists were not able to carry out their session plan, they may have located explanations in terms of client dispositions or behaviors. It is important to establish how observable client behaviors arising

in session may relate to implementation outcomes. Observational data can narrow the range of interpretations of previous findings using therapist-report and objectively characterize in-session youth and caregiver engagement behaviors and their relation to provider EBP delivery (Chu & Kendall, 2004; Patterson & Chamberlain, 1994; Prinz & Miller, 1994).

The Current Study

The current observational study is one of the first to examine observer-rated, in-session client behaviors that may present challenges to therapists within community EBP implementation. This neutral, observational study builds upon previous findings of therapist-reported Engagement Challenges and descriptively characterizes the extensiveness and correlates of observer-rated Youth and Caregiver Engagement Challenges that arise within EBP sessions. The present study had three aims. First, we sought to identify therapist-, youth- and session- level predictors of observer-rated Engagement Challenges. Based on previous literature, we hypothesized that Latinx youth (versus non-Latinx youth) and boys (versus girls) would present with more engagement challenges. However, we also examined whether non-Latinx therapists may encounter more engagement challenges in a context serving primarily Latinx youth. Additionally, we examined whether engagement challenges might be more extensive in sessions where therapists delivered more highly structured (versus less structured) EBPs. Our second aim was to examine associations between observer-rated Engagement Challenges and therapist reports of their ability to carry out session activities as planned. The third aim was to examine associations between observer-rated Youth and/or Caregiver Engagement Challenges and observer-rated extensiveness of EBP strategy delivery. Based on literature documenting therapist concerns about EBP-client fit, we anticipated that therapists would perceive that Engagement Challenges complicated their delivery of planned session activities. We included both therapist-reported and independently observed implementation outcomes to differentiate potential impacts of Engagement Challenges on therapist perceived self-efficacy in delivering their session plan versus observable task performance in EBP strategy delivery.

Method

Study Context

In 2010, the Los Angeles County Department of Mental Health (LACDMH) launched the Prevention and Early Intervention (PEI) program, which utilizes a state revenue stream funded by a voter-approved ballot initiative to promote EBP implementation for youth and adults. The current study examines EBP implementation within the context of the PEI program for youth services which include services for children and adolescents, aged 0 to 18. Through PEI contracts, LACDMH offers reimbursement to community agencies for the delivery of EBPs from an approved list of over 50 EBPs and facilitated the rapid scale-up of six EBPs: Child-Parent Psychotherapy (CPP), Positive Parenting Program (Triple P), Trauma-Focused Cognitive Behavior Therapy (TF-CBT), Managing and Adapting Practice (MAP), Seeking Safety (SS), and Cognitive Behavioral Intervention for Trauma in Schools (CBITS) (Regan et al., 2017). Data for the current study was drawn from in-depth portion of the Knowledge Exchange on Evidence-based Practice Sustainment (4KEEPS) study, which examined determinants of EBP sustainment within PEI (Lau & Brookman-Frazee, 2016).

Procedures

All study procedures were approved by the University of California, Los Angeles and University of California, San Diego Institutional Review Boards. Data collection occurred between 2015 and 2017. Ninety-eight agencies directly operated or contracted by LACDMH to deliver at least one of these six EBPs were eligible for inclusion in the larger 4KEEPS study (for more details on the larger study and implementation context see Lau and Brookman-Frazee, 2016). Of these ninety-eight agencies, sixty-nine agencies (70.40%) participated in an online survey study. Program leaders from participating LACDMH-contracted agencies were invited to participate in the more intensive In-Depth portion of the 4KEEPS Study, which included face-to-face interviews with program leaders and therapists, along with session data from therapists delivering one of the six EBPs under investigation

For the in-depth study, therapists were recruited for participation in the study at staff meetings of community mental health program sites that were contracted by LACDMH to deliver one of the six EBPs of interest. The study team enrolled 26 program sites serving families in urban, suburban and semi-rural areas of the county. Because CBITS did not achieve scale-up (Brookman-Frazee et al., 2016), therapists in the current sample did not report on its delivery. Therapists completed a baseline survey, and they were asked to provide up to three treatment session audio recordings each for up to three youth clients and to complete post-session surveys. Therapists were asked to submit session recordings for clients who they believed would remain in treatment for at least the next two months. Therapists obtained written consent from caregivers for session recording which they were instructed to add to the patient's medical record maintained by the agency. However, because youth and caregivers were not enrolled as participants in the study, no identifying information was provided to the research team about clients or caregivers beyond basic demographic characteristics and mental health problem focus. Therapists were not required to submit consecutive sessions. It was possible for therapists to be trained in multiple EBPs and deliver multiple EBPs across their caseload (e.g., Client 1 gets EBP A and Client 2 gets EBP B). In the current study, each youth client received the same EBP across their sessions. Therapists received \$20 for completing the background survey and an additional \$10 for each session audio recording and session questionnaire (i.e., up to nine sessions total).

Participants

In the present study, 102 community therapists provided 666 session audio recordings for treatment delivered to 267 youth clients. The average age of therapists was 34.18 years ($SD = 8.85$, Range = 25–62). The majority of therapists self-identified as female (88.24%), were Latinx (55.88%), had a Master's degree (85.29%), and were not licensed (80.39%). More than half were able to deliver treatment in Spanish (52.94%) and the average number of years practicing psychotherapy was 4.46 years ($SD = 4.40$, range = 0–35). Therapists reported an average of 17.17 ($SD = 6.94$, Range = 1–44) clients in their caseload. Of the 267 youth clients, the majority were between 6 and 12 years ($N = 164$, 61.42%) with the mean age being 9.85 ($SD = 3.83$ years, Range = 1–18). Approximately half identified as female ($N = 138$, 51.69%); the majority identified as Latinx ($N = 191$, 71.54%) and 23.60% ($N = 63$) identified as a non-Latinx racial/ethnic minority (e.g., African American, Asian American, Multiracial) with 4.87% ($N = 13$) identifying as Non-Hispanic White. We

excluded one session as one youth had sessions with two different EBPs delivered and we wanted to ensure that EBP delivered in session could be treated as a client-level variable: MAP (n = 135, 50.56%), TF-CBT (n = 88, 32.96%), CPP (n = 20, 7.49%), Triple-P (n = 15, 5.62%) and SS (n = 9, 3.37%). All youth accessed care from agencies serving Medicaid-eligible families, suggesting they came from low-income backgrounds.

The current study reports on 666 treatment sessions with varying session participants. The majority of sessions were youth-only (n = 386, 57.96%), followed by youth and caregiver conjoint sessions (n = 226 sessions, 33.93%), and caregiver-only sessions (n = 54, 8.11%). Thus, Youth Engagement Challenges could be coded in youth-present sessions with a youth aged 6 years or older (N = 535, 80.33%) and Caregiver Engagement Challenges could be coded in caregiver-present sessions (N = 280 sessions, 42.04%). The problem focus of the session included: trauma (n = 291, 43.69%), conduct (n = 181, 27.18%), anxiety (n = 111, 16.67%) and depression (n = 83; 12.46%). Therapist, client and session characteristics by type of session (i.e., youth-present versus caregiver-present) are described further in Table 1.

Measures

Therapist, Client, and Session Characteristics—Therapists reported on their race/ethnicity, licensure status, and caseload in the baseline survey. Therapists also reported on their client's race/ethnicity, gender, and age. The current study used youth race/ethnicity as a dichotomous variable specifying Latinx versus non-Latinx due to the sample being predominantly Latinx (71.54%) and small sample sizes for all other groups. Therapists completed accompanying surveys for each session recording indicating the EBP delivered, the problem focus of the session, and the session participants (e.g., youth only, caregiver only, both youth and caregiver).

Observer-rated Client Engagement Challenges.—The current study aimed to measure client engagement behaviors theorized to pose challenges to EBP implementation from the perspective of the therapist. Thus, session audio recordings were coded for observable, in-session Engagement Challenges.

Coding Procedures.: Coders listened to the complete session audio recording and made detailed notes on the behaviors of caregivers and youth clients aged six years and older. Then, coders assigned a global extensiveness rating on a 5-point Likert scale of the extent to which each Engagement Challenge was observed within the session (0 = *Not observed* to 4 = *Observed to a great extent*). When assigning extensiveness ratings, coders considered the detail, depth, duration, frequency, and intensity with which an Engagement Challenge was observed.

Coder Reliability Training.: A group of 16 coders (88% undergraduate, 13% post-baccalaureate) were trained. Coder training included manual review, didactic training sessions, and practice coding. Coders were considered reliable and ready to start independent coding when they reached at least 80% agreement with “gold standard” item ratings across at least six training sessions. To assess inter-rater reliability, 20% of sessions were randomly selected to be coded by a second coder.

Observational Coding System.: We originally attempted to code seven engagement behaviors for youth and/or caregivers that were developed on the basis of both theoretical models and empirical studies of engagement. For inclusion in the current study analyses, codes had at least a 15% base rate in session recordings and acceptable interrater reliability based on double-coded sessions (ICC = .5) (Cicchetti, 1994). Due to low base rates, we were not able to report on the following codes: Non-Completion of Home Practice, Negative Affect, Difficulty Mastering skills or Understanding Concepts, and Expressed Reluctance/Refusal to participate. The latter two codes also did not achieve the criterion of ICC > .50. The Unengaged/Passive behavior code met the frequency threshold but was excluded because of low ICCs. It is possible that having audio-recorded (versus video-recorded) therapy sessions may have posed difficulties in reliably coding many behaviors (e.g., passive disengagement). These omitted codes have been studied as key indicators of youth and caregiver engagement in previous studies (Berkel et al., 2011; Chu & Kendall, 2004; Coatsworth et al., 2018; Patterson & Chamberlain, 1994).

Final Codes.: From sessions with a caregiver present we report on Caregiver Expressed Concerns. Although older observational studies framed parent engagement behaviors as “resistance” (Patterson & Chamberlain, 1994), we developed the code for Expressed Concerns to include voicing issues related to the acceptability, feasibility or relevance of interventions (e.g., “Time-out doesn’t work for my child”). Expressed Concerns may present a challenge or opportunity for therapists to work on engagement, but no surplus meaning about client resistance or compliance is inferred. This operational definition of Expressed Concerns was previously validated in another observational study of parent engagement in a different publicly funded children’s mental health services context, where good interrater reliability was achieved (ICC=.74; Guan et al., 2019). In the current study, Caregiver Expressed Concerns had adequate interrater reliability (ICC= .69).

We report on two youth behavior codes and one caregiver behavior code. The Youth Engagement Challenges are: (1) Expressed Concerns about the helpfulness/relevance/acceptability/feasibility of an intervention strategy, and (2) Disruptive Behaviors (e.g., destructive, aggressive, hyperactive or impulsive behaviors). Given that these behaviors may be more developmentally normative in early childhood, Youth Engagement Challenges were only reported on for youth clients aged six years and older. Of the codes included in analyses, the two Youth Engagement Challenges had a mean ICC of .60 (SD=.10; Range = .51-.70).

Perceptions of EBP Delivered—Therapist perceptions toward the EBP they delivered in session was assessed through the Perceived Characteristics of Intervention Scale (PCIS) and was collected at baseline. The 8-item PCIS (Cook et al., 2015) taps into perceived characteristics of practice innovation that theoretically are likely to influence therapists’ own attitudes toward and delivery of the EBPs examined in the present study. Therapists rated their agreement with each of the eight items assessing concepts including *Relative Advantage* (e.g., “[The practice] is more effective than other therapies I have used.”), *Compatibility* (e.g., “[The practice] is aligned with my clinical judgment.”), *Complexity* (e.g., “[The practice] is easy to use.”), and *Potential for Reinvention* (e.g., “[The practice]

can be adapted to meet the needs of my patients.”) on a 5-point Likert-type scale (1 = *Not at all* to 5 = *A very great extent*). Therapists’ responses to the eight items were averaged for the EBP they reported using for the specific session, making the PCIS a session-level variable. Overall, the measure showed good reliability for each EBP included in the present study ($\alpha_{\text{CPP}} = .92$, $\alpha_{\text{MAP}} = .89$, $\alpha_{\text{SS}} = .92$, $\alpha_{\text{TF-CBT}} = .95$, $\alpha_{\text{Triple-P}} = .97$). PCIS has been validated in ethnically diverse providers working in similar contexts (e.g., Dierkhising & Kerig, 2018; Pickard, Rowless, & Ingersoll, 2019).

EBP Prescribed Session Content and Order—Based on the LACDMH PEI Implementation Handbook (LACDMH 2010a–e) and practice manuals, the six EBPs of interest were coded for whether or not they had prescribed session content and order (Barnett et al., 2017). Prescribed session content and order was defined as an EBP treatment manual that had explicit guidance as to what content should be covered in session (e.g., didactics scripts, specified skills training, discussion guides, activities) and had a suggested order for when specified treatment content should be delivered. Five child clinical psychologists with expertise in EBPs participated in a group consensus process to determine how to characterize each EBP under investigation. TF-CBT and Triple P were categorized as having prescribed session content and order, whereas CPP, MAP, and Seeking Safety were categorized as not.

Therapist-Reported Ability to Carry Out Planned Session Activities—For each session recording submitted, therapists reported the extent to which they were “able to carry out planned activities for the session” on a 6-point Likert scale (0 = *Not at all* to 5 = *Fully*). Single-item measures have been shown to have similarly acceptable reliability comparable to multiple-item measures (Wanous & Hudy, 2001; Wanous & Reichers, 1996).

Observer-Rated Extensiveness of EBP Strategy Delivery—The extent to which therapists delivered EBP strategies for common child mental health targets was assessed using observer-ratings from the EBP Concordant Care Assessment (ECCA- α) (Brookman-Frazer et al., 2021). Distinct teams coded sessions for Engagement Challenges and EBP Strategy Delivery. Items in the ECCA- α were derived from a practice expert survey and previous measurement systems, including the Practice and Research: Advancing Collaboration version of the Therapy Process Observational Coding System (PRAC-TPOCS; Garland et al., 2010; Garland, Brookman-Frazer, & McLeod, 2008) and the Monthly Treatment and Progress Summary (MTPS; Child and Adolescent Mental Health Division, 2003). The ECCA- α captures strategies from six EBPs of interest: CPP, CBITS, TF-CBT, SS, MAP, and Triple P. Items assess both EBP Content (24 items) and EBP Technique (8 items) strategies. Content items were defined as, “the substance or issue being addressed in the therapeutic intervention” and included topics such as time-out, exposure, and trauma narrative. Technique items that were defined as “the active method or the way a therapist attempts to intervene with, or relate to, a client” and included therapeutic strategies such as agenda setting, homework assignment and review, modeling, and role play. Specific content areas could be covered using different techniques and specific techniques could be used to cover many different content areas.

Coding Procedure.: Similar to Engagement Challenges coding procedures, ECCA coders listened to the session recording, took detailed notes, and rated the extensiveness of ECCA items with a global score for each Content or Technique item observed. Coders were instructed to consider two related dimensions in rating the extensiveness of strategy use: 1) the thoroughness of the strategy use (including effort, detail, depth/intensity, and follow-through), and 2) the frequency of the strategy use (number of instances used during a session). Items were rated on a 7-point Likert scale reflecting occurrence and extent to which the strategy was used in a given session (0 = *Not used* to 6 = *Used to a great extent*).

Coder Training and Reliability.: A team of 13 coders (61.5% undergraduate, 38.5% post-baccalaureate) were trained in the ECCA Observational Coding System. Coder training included manual review, didactic training sessions, and practice coding. Coders were considered reliable and ready to start independent coding when they reached at least 80% agreement with “gold standard” item ratings across at least six training sessions. Examination of double-coded sessions showed adequate inter-rater reliability (ICC > .40) for 32 ECCA items with a mean ICC of .74 ($SD=.11$; Range = .44-.92).

ECCA Scoring.: For each session, distinct ECCA Content and Technique composite scores were calculated based on the mean of the extensiveness ratings for the content items and technique items for the session problem focus, respectfully. Composite scores ranged from 0–6 with higher composite scores indicating greater extensiveness of EBP strategy delivery.

Analytic Plan

All analyses were conducted in Stata version 15.1 (StataCorp, 2017). Separate models were conducted for youth-present sessions ($N = 535$) and caregiver-present sessions ($N = 280$). Due to the multilevel structure of the data, we first examined the proportion of variance attributed to each level of data. We conducted five null models with Youth Engagement Challenges, Caregiver Expressed Concerns, therapist-reported ability to carry out session as planned, observer-rated EBP Content, and observer-rated EBP Technique delivery set as the outcomes and then computed the intraclass correlation (ICC) for each model. Models for Caregiver Expressed Concerns and observer-rated EBP Content revealed ICCs > .05 at the agency level, which indicates notable clustering at the agency level based on conventional ICC guidelines (Hayes, 2006); all other models had ICCs < .05 at the agency level. Given that at least one dependent variable necessitated a four-level structure, all analyses employed a four-level structure with sessions (Level 1), nested within clients (Level 2), nested within therapists (Level 3), nested within agencies (Level 4).

For Aim 1, we conducted three multilevel linear regression models to identify session-, client-, and therapist-level predictors of specific observer-rated Youth and Caregiver Engagement Challenges: 1) Youth Expressed Concerns, 2) Youth Disruptive Behaviors, and 3) Caregiver Expressed Concerns. Session-level predictors included whether the EBP delivered had a prescribed order, caregiver session presence, and youth session presence. Client-level predictors included demographic variables. Therapist-level predictors included therapist ethnracial background, licensure status, and caseload. All models covaried for session focus (i.e., the targeted problem in session, Conduct as referent) to control for

the potential impact of youth presenting problem on the engagement challenge of Youth Disruptive Behaviors.

For Aim 2, we conducted two multilevel regression models to identify associations between observer-rated Engagement Challenges and therapist-reported ability to carry out planned session activities. The first model included the two Youth Engagement Challenges as individual variables. In the second model, Caregiver Expressed Concerns was the sole independent variable of interest. Both models included therapist-, client- and session-level covariates, including variables that were significant in results from Aim 1 models. Therapists' PCIS scores were included as a covariate for Aim 2 models as it was found to be a significant predictor of "Therapist-Reported Ability to Carry out Planned Session Activities" in a prior study (Gellatly et al., 2018). For Aim 3, we conducted two models to examine how youth Engagement Challenges were associated with 1) observed delivery of EBP Content and 2) observed delivery of EBP Techniques. Two additional models were run with Caregiver Expressed Concerns predicting 1) EBP Content and 2) EBP techniques. Select covariates were included to capture the association of Engagement Challenges with EBP delivery over and above factors identified in Aims 1 and 2, and in a different study (Lau et al., 2020).

Results

Occurrence of Engagement Challenges

Across all sessions, at least one Engagement Challenge occurred in 43.99% (n=293) of sessions. Observers recorded at least one Youth Engagement Challenge in 37.76% (n=202) of youth-present sessions. In youth-present sessions, Expressed Concerns occurred in 22.62% (n=121) of sessions with an average extensiveness rating of 1.51 (SD=.85; Range=1–4); and Disruptive Behaviors in 20.00% (n=107) of sessions with an average extensiveness rating of 1.64 (SD=.85; Range=1–4). The Caregiver Engagement Challenge of Expressed Concerns was observed in 23.57% (n=66) of caregiver-present sessions with an average extensiveness rating of 1.58 (SD=.80; Range=1–4).

Aim 1: Predictors of Engagement Challenges

Youth Models—For predictors of Engagement Challenges, the standardized coefficients (B) and 95% confidence intervals are presented in Table 2. In the youth models, most of the tested therapist-, client-, or session-level variables were not significantly associated with extensiveness ratings of Youth Engagement Challenges. Youth Expressed Concerns had a negative association with therapist caseload ($B = -0.01$, 95% CI[-.02, -.001]), $p < .05$) and a positive association with age such that sessions with youth clients 13 years or older had higher ratings than sessions with youth 6–12 years old ($B = .27$, 95% CI[.15, .39], $p < .01$).

Youth Disruptive Behaviors was positively associated with caregiver presence in session ($B = .18$, 95% CI[.03, .32], $p < .05$). Client age was also significantly associated with Youth Disruptive Behaviors, such that sessions with youth 13 years old and older had lower extensiveness ratings compared to sessions with youth 6–12 years old ($B = -.29$, 95% CI[-.46, -.11]), $p < .01$). Youth Disruptive Behaviors ratings were also higher in sessions

with boys compared to girls ($B = .19$, 95% CI[.04, .34], $p < .05$). When compared to non-Latinx youth, Latinx youth had lower ratings of Youth Disruptive Behaviors ($B = -.18$, 95% CI[-.37, -.003], $p < .01$). Sessions with licensed therapists had lower ratings of Youth Disruptive Behaviors ($B = -.20$, 95% CI[-.39, -.01], $p < .05$).

Caregiver Model—Results for predictors of Caregiver Expressed Concerns are summarized in Table 2. EBPs with prescribed session content and order ($B = .37$, 95% CI[.12, .62], $p < .01$) had a positive association with Caregiver Expressed Concerns. No other independent variables were significantly associated.

Aim 2: Youth and Caregiver Engagement Challenges as Predictors of Therapist-Reported Ability to Carry out Planned Session Activities

Findings are summarized in Table 3. Youth Expressed Concerns ($B = -.05$, 95% CI[-.17, .08], $p > .05$), and Disruptive Behaviors ($B = -.12$, 95% CI[-.25, .02], $p > .05$) were not associated with therapist ability to carry out session activities. Caregiver Expressed Concerns ($B = -.21$, 95% CI[-.39, -.02], $p < .05$) was negatively related to therapist-reported ability to carry out session as planned

Aim 3: Observer-Reported Youth and Caregiver Engagement Challenges as Predictors of Observer-Rated Delivery of EBP Content and Techniques

In sessions with the youth present, observers reported that therapists used EBP Content strategies with an average .77 extensiveness rating ($SD = .54$; range= 0–2.83) and EBP Technique strategies with an average of 1.98 extensiveness rating ($SD = 1.00$; range= 0–5.13). In sessions with the caregiver present, observers reported that therapists used EBP Content strategies with an average .57 extensiveness rating ($SD = .51$; range= 0–2.57) and EBP Technique strategies with an average of 1.92 extensiveness rating ($SD = 1.05$; range= 0–5.13)

Youth Models—Table 4 displays the results of the associations between the two Youth Engagement Challenges and observer-reported delivery of EBP Content, and delivery of EBP Techniques. Youth Expressed Concerns and Youth Disruptive Behaviors were not significantly associated with either observed delivery of EBP Content, or delivery of EBP Techniques.

Caregiver Models—Table 4 also includes the two models, examining Caregiver Expressed Concerns as a predictor of observer-reported delivery of EBP Content and EBP Techniques. Caregiver Expressed Concerns ($B = .08$, 95% CI[.01, .15], $p < .05$), was significantly associated with higher extensiveness of EBP Content delivered as reported by observers but not observed delivery of EBP Techniques.

Discussion

The current study used observational methods and therapist reports to examine correlates of in-session youth and caregiver behaviors, and whether these behaviors pose challenges to community EBP delivery. Observed Youth Engagement Challenges were associated

with client demographic and session factors in unsurprising ways. However, there was little systematic variability in observed Caregiver Expressed Concerns associated with the session-, client-, and therapist-factors examined. Youth Engagement Challenges were not associated with therapist self-appraisals of ability to carry out planned session activities or observed therapist delivery of EBP Content or Technique strategies. However, analyses revealed that in sessions where Caregiver Expressed Concerns were observed, therapists reported they were less able to carry out activities as planned. In contrast, observed Caregiver Expressed Concerns were positively associated with observer-reported extensiveness of EBP Content strategies delivered in those sessions.

Engagement Challenges were observed in just under half of all sessions, with Youth Engagement Challenges observed in approximately 38% of sessions attended by youth, compared to the approximately 24% rate of Caregiver Engagement Challenges in sessions with caregivers. Based on therapist reports, Gellatly et al. (2018) likewise found that client Expressed Concerns were more frequent in youth-attended sessions versus sessions in which caregivers were present. In the current study, the presence of caregivers in sessions was associated with more Disruptive Behaviors. Youth may be more comfortable engaging in avoidant behaviors in session when caregivers are present (Barmish & Kendall, 2005). The implications of disruptive behaviors in caregiver-attended sessions for EBP outcomes should be studied further, as one study on combined cognitive behavioral therapy and parent management training showed that children who were dysregulated in sessions with their parents had fewer treatment gains than better regulated dyads (De Rubeis & Granic, 2012).

Consistent with developmental expectations, we found that Youth Disruptive Behaviors were more common with younger clients, whereas Youth Expressed Concerns were associated with older clients. The age findings makes sense when thinking about development such that a child progresses from expressing their emotions using nonverbal behaviors to an increase in verbal communication skills as they enter adolescence (Zeman et al., 2006). When examining ethnicity, we found that Latinx youth clients presented with fewer Engagement Challenges related to Youth Disruptive Behaviors compared to non-Latinx youth, controlling for session problem focus. This finding could be related to intolerance for malcriados or rude/bad mannered in Latinx families (Arcia, Fernandez, & Jaquez, 2005) that may extend to in-session behavior in therapy. However, any such cultural explanations require direct investigation.

We were primarily interested in the relationship between observed engagement related behaviors and therapist EBP implementation outcomes. A strength of this study is the use of multiple outcomes from multiple reporters related to EBP delivery. Therapist-reported ability to carry out planned session activities reflects a broad construct of therapists' perceptions of being able to deliver their session plan as intended whereas ECCA Content and Technique scores reflect an observer's assessment of the extent of the therapist's EBP strategy delivery. Given that client engagement is a particularly salient component of the treatment process for providers delivering EBPs, considering both therapist perspectives and independent observations can help disentangle the complex interplay of engagement and EBP delivery (Marques et al., 2016). Our findings show that Youth Engagement Challenges were not associated with therapist perceptions of carrying out planned activities

nor observer-rated delivery of EBP strategy delivery. When examining therapist factors, a higher caseload was negatively associated with Youth Expressed Concerns. Community therapists are called upon to routinely manage youth behavioral challenges, and may be prepared to re-engage child/adolescent clients in ways that allow for intervention delivery. Therapists who have more clients may be honing their clinical skills to either prevent or effectively reduce youth concerns or negative emotions about treatment. An alternative perspective would be that therapists with large caseloads are quickly moving past potential client concerns about interventions to get to their agenda, making less space for Expressed Concerns.

In contrast to predictors of Youth Engagement Challenges, findings on correlates of Caregiver Expressed Concerns were more complex. In sessions where an EBP with prescribed session content or order was being delivered, there were higher ratings of Caregiver Expressed Concerns which may indicate that EBPs that are less flexible may arouse concerns about fit to clients' needs (Burgess et al., 2017; Jensen-Doss et al., 2009). Moreover, Caregiver Expressed Concerns were negatively associated with therapist perceived ability to carry out session activities as planned. This finding is consistent with studies reporting on therapist perceptions that parents' low engagement poses a barrier to treatment delivery (Chlebowski, Magaña, Wright, & Brookman-Frazer, 2018; Garland et al., 2013). Further, empirical studies and a prominent framework note that EBP adaptation is at times necessary to strengthen fit and facilitate client engagement (Wiltsey Stirman et al., 2019). Interestingly, however, Caregiver Expressed Concerns were positively related to observed extensiveness of therapist delivery of EBP Content strategies. In sessions where caregivers were expressing concerns about intervention fit or feasibility, therapists were also observed to be more thorough in their delivery of EBP content (e.g., time-out, exposure, trauma narrative, and activity scheduling).

Although Caregiver Expressed Concerns appeared to be related in opposing directions to the two distinct implementation outcomes, these findings may be reconcilable. When therapists are prompted by caregivers to attend to questions and concerns about EBP strategies, they may respond with more detailed explanations, rationale, and information (reflecting higher ECCA Content extensiveness ratings). However, as a result, therapists may also feel that they were not able to progress through planned content areas or activities in that session (reflecting lower ratings of ability to carry out planned session activities). Alternately, therapists who present EBP content more thoroughly may evoke more caregiver discussion of concerns and questions. That is, greater focus on EBP content may elicit expressed concerns. The directionality of these relationships requires clarification in future studies that examine implications of these EBP therapy processes for therapeutic change.

Ultimately, when caregivers express their concerns about treatment, this may present a challenge for therapists to address in-session, but this may nonetheless represent a positive indicator of caregiver engagement and the therapeutic relationship (Haine-Schlagel & Walsh, 2015). Caregivers must closely attend to intervention strategies presented in order to voice their opinions and present misgivings (Guan et al., 2019). It may also be a good sign for the therapeutic relationship when caregivers are willing to openly express negative self-cognitions and attributions about their ability to change youth behavior through treatment

strategies (Morrissey-Kane & Prinz, 1999). In this study, heterogeneous Expressed Concerns may have conflated more traditionally construed resistance behaviors (I “won’t”) with doubts and concerns related to self-efficacy (I “can’t”) (Patterson & Chamberlain, 1994). Findings suggest that therapists would benefit from learning strategies to discuss and rectify caregiver concerns, and future research that differentiates Caregiver Engagement Challenges may reveal more specific process barriers and facilitators to therapist EBP delivery. In sum, results from this study point to the need for experimental study of caregiver engagement interventions that are gaining attention within community EBP implementation efforts that can increasing their potency (e.g., Becker et al., 2020; Haine-Schlagel, Martinez, Roesch, Bustos, & Janicki, 2016).

Limitations

Though the study makes novel contributions to the literature on community EBP implementation, several limitations must be considered. First, the behaviors in analyses do not represent a comprehensive catalogue of engagement behaviors. Some engagement behaviors intended to be measured were not observed with sufficient frequency and/or reliably rated by coders and were omitted from the analyses. Also, engagement behaviors typically considered desirable (e.g., self-disclosure) were not measured given our initial focus on challenges. Future studies that include a wider array of engagement behaviors are needed to deepen our understanding of the complex interplay of in-session participation and EBP delivery. Additionally, there may be engagement challenges that are difficult to perceive by therapists and/or by coders rating audio recordings, and therapists may want to know their clients’ concerns in order to address them; thus, measures of client reported engagement challenges should be integrated into care. Examining and describing engagement-related behaviors from the client perspective may prove illuminating. Second, the selection of sessions and clients in the sample were non-random. This may have led to a sample of clients with higher levels of engagement than is representative. Third, sessions were not necessarily drawn from early phase treatment when Engagement Challenges may be more common, particularly when caregivers may need clarification on the rationale for EBP strategies when initially introduced. Fourth, data are not presented on therapist skillfulness or competence in EBP delivery within our examination of Engagement Challenges. Collecting data on therapists’ EBP training and competence could have helped clarify the relationship between proficiency in EBP delivery and occurrence of Engagement Challenges. Fifth, although we conceptualized Engagement Challenges to predict both therapist-perceived ability to carry out session as planned and observed EBP implementation, we have acknowledged that directionality could be reversed such that the extensiveness of EBP Content strategy delivery may have evoked Engagement Challenges. Employing sequential analysis of Engagement Challenges and EBP strategy delivery can better elucidate the directions of influence. Lastly, our sample was comprised of racially and ethnically diverse community therapists that were mostly unlicensed, Master’s level clinicians serving clients from low-income and mostly Latinx backgrounds. These background characteristics should be considered when generalizing findings.

Conclusion and Future Directions

This study used therapist and observer reports to investigate the association between youth and caregiver engagement, and EBP implementation. Findings suggest that although Youth Engagement Challenges were observed more frequently than Caregiver Challenges, therapists are responding to Youth Challenges without deviating from the treatment plan. In contrast, therapists reported that their sessions were derailed when caregivers Expressed Concerns, despite robust EBP delivery as rated by observers. The field would benefit with continued scientific dialogue about whether expressed concerns is an index of active participation or a threat to in-session involvement (e.g., Haine-Schlagel et al., 2016; Schoenwald et al., 2012). Tracking clients' in-session participation over several sessions can clarify patterns of engagement, including attendance and relational variables, that can predict engagement challenges (Chu et al., 2010). The current study did not systematically enumerate the ways in which community therapists respond to Engagement Challenges. Such analyses could generate practice-based evidence on how community therapists' responsiveness can promote engagement and EBP implementation success. Sequential measurement of session interactions, in particular, would help elucidate engagement strategies that therapists can use with caregivers to facilitate EBP delivery. Future work is needed to examine how supervisors support therapists facing Engagement Challenges in EBP delivery. Notably, as community mental health service settings often have several demands on provider time, investigating barriers and facilitators to effective supervisory efforts revolving around engagement can help maximize the potential of supervision. Lastly, it may be helpful to examine the relationship between Engagement Challenges and therapist adaptations to EBPs, as it is possible that therapists make modifications to EBP protocols in an effort to address these challenges. Ultimately, finding ways to support therapists in managing caregiver Engagement Challenges when implementing EBPs in community mental health settings will hopefully lead to better treatment outcomes for high-risk families in need of high-quality care.

Acknowledgments

Grant support: This work was supported by the National Institute of Mental Health under Grant R01MH100134. First author supported by the Robert Wood Johnson Foundation under Award ID 74805 and the National Institute of Mental Health under Grant F31MH121000.

References

- Arcia E, Fernandez MC, & Jaquez M (2005). Latina mothers? Characterizations of their young children with disruptive behaviors. *Journal of Child and Family Studies*, 14(1), 111–125. 10.1007/s10826-005-1126-8
- Bamberger KT, Coatsworth JD, Fosco GM, & Ram N (2014). Change in participant engagement during a family-based preventive intervention: ups and downs with time and tension. *Journal of Family Psychology*, 28(6), 811–820. 10.1037/fam0000036 [PubMed: 25383795]
- Barmish AJ, & Kendall PC (2005). Should parents be co-clients in cognitive-behavioral therapy for anxious youth? *Journal of Clinical Child & Adolescent Psychology*, 34(3), 569–581. 10.1207/s15374424jccp3403_12 [PubMed: 16026220]
- Barnett M, Brookman-Frazee L, Regan J, Saifan D, Stadnick N, & Lau A (2017). How intervention and implementation characteristics relate to community therapists' attitudes toward evidence-based

- practices: a mixed methods study. *Administration and Policy in Mental Health and Mental Health Services Research*, 44(6), 824–837. 10.1007/s10488-017-0795-0 [PubMed: 28236076]
- Becker KD, Boustani M, Gellatly R, & Chorpita BF (2018). Forty years of engagement research in children's mental health services: multidimensional measurement and practice elements. *Journal of Clinical Child & Adolescent Psychology*, 47(1), 1–23. 10.1080/15374416.2017.1326121 [PubMed: 28574780]
- Becker KD, Dickerson K, Boustani MM, & Chorpita BF (2020). Knowing what to do and when to do it: mental health professionals and the evidence base for treatment engagement. *Administration and Policy in Mental Health and Mental Health Services Research*, 0123456789. 10.1007/s10488-020-01067-6
- Berkel C, Mauricio AM, Schoenfelder E, & Sandler IN (2011). Putting the pieces together: an integrated model of program implementation. *Prevention Science*, 12(1), 23–33. 10.1007/s11121-010-0186-1 [PubMed: 20890725]
- Brookman-Frazee L, Stadnick NA, Lind T, Roesch S, Terrones L, Barnett ML, Regan J, Kennedy CA, Garland F, A., & Lau AS (2021). Therapist-observer concordance in ratings of ebp strategy delivery: challenges and targeted directions in pursuing pragmatic measurement in children's mental health services. *Administration and Policy in Mental Health and Mental Health Services Research*, 48(1), 155–170. 10.1007/s10488-020-01054-x [PubMed: 32507982]
- Brookman-Frazee L, Stadnick N, Roesch S, Regan J, Barnett M, Bando L, Innes-Gomberg D, & Lau A (2016). Measuring sustainment of multiple practices fiscally mandated in children's mental health services. *Administration and Policy in Mental Health and Mental Health Services Research*, 43(6), 1009–1022. 10.1007/s10488-016-0731-8 [PubMed: 27020796]
- Buckingham SL, Brandt NE, Becker KD, Gordon D, & Cammack N (2016). Collaboration, empowerment, and advocacy: consumer perspectives about treatment engagement. *Journal of Child and Family Studies*, 25(12), 3702–3715. 10.1007/s10826-016-0507-5
- Budd KS, & Lyon AR (2010). A community mental health implementation of parent-child interaction therapy (PCIT). *Journal of Child and Family Studies*, 19(5), 654–668. 10.1007/s10826-010-9353-z [PubMed: 20877583]
- Burgess AM, Okamura KH, Izmirian SC, Higa-McMillan CK, Shimabukuro S, & Nakamura BJ (2017). Therapist attitudes towards evidence-based practice: a joint factor analysis. *Journal of Behavioral Health Services and Research*, 44(3), 414–427. 10.1007/s11414-016-9517-8 [PubMed: 27230350]
- Chacko A, Jensen SA, Lowry LS, Cornwell M, Chimklis A, Chan E, Lee D, & Pulgarin B (2016). Engagement in behavioral parent training: review of the literature and implications for practice. *Clinical Child and Family Psychology Review*, 19(3), 204–215. 10.1007/s10567-016-0205-2 [PubMed: 27311693]
- Child and Adolescent Mental Health Division. (2003). *Service Provider Monthly Treatment and Progress Summary*. Hawaii Department of Health Child and Adolescent Mental Health Division.
- Chlebowski C, Magaña S, Wright B, & Brookman-Frazee L (2018). Implementing an intervention to address challenging behaviors for autism spectrum disorder in publicly-funded mental health services: therapist and parent perceptions of delivery with Latinx families. *Cultural Diversity and Ethnic Minority Psychology*, 24(4), 552–563. 10.1037/cdp0000215s [PubMed: 30024185]
- Chu BC, & Kendall PC (2004). Positive association of child involvement and treatment outcome within a manual-based cognitive-behavioral treatment for children with anxiety. *Journal of Consulting and Clinical Psychology*, 72(5), 821–829. 10.1037/0022-006X.72.5.821 [PubMed: 15482040]
- Chu BC, Suveg C, Creed TA, & Kendall PC (2010). Involvement shifts, alliance ruptures, and managing engagement over therapy. In Castro-Blanco D & Karver MS (Eds.), *Elusive alliance: Treatment engagement strategies with high-risk adolescents* (pp. 95–121). American Psychological Association. 10.1037/12139-003
- Cicchetti DV (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6(4), 284–290. 10.1037/1040-3590.6.4.284

- Coatsworth JD, Hemady KT, & George MW (2018). Predictors of group leaders' perceptions of parents' initial and dynamic engagement in a family preventive intervention. *Prevention Science*, 19(5), 609–619. 10.1007/s11121-017-0781-5 [PubMed: 28386808]
- Cook JM, Thompson R, & Schnurr PP (2015). Perceived characteristics of intervention scale. *Assessment*, 22(6), 704–714. 10.1177/1073191114561254 [PubMed: 25520213]
- de Haan AM, Boon AE, de Jong JTVM, Hoeve M, & Vermeiren RRJM (2013). A meta-analytic review on treatment dropout in child and adolescent outpatient mental health care. *Clinical Psychology Review*, 33(5), 698–711. 10.1016/j.cpr.2013.04.005 [PubMed: 23742782]
- De Rubeis S, & Granic I (2012). Understanding treatment effectiveness for aggressive youth: the importance of regulation in mother–child interactions. *Journal of Family Psychology*, 26(1), 66–75. 10.1037/a0026837 [PubMed: 22309818]
- Dierkhising CB, & Kerig PK (2018). Pilot evaluation of a university-based training in trauma-informed services for gang intervention workers. *Journal of Aggression, Maltreatment and Trauma*, 27(3), 291–308. 10.1080/10926771.2017.1382634
- Dixon LB, Holoshitz Y, & Nossel I (2016). Treatment engagement of individuals experiencing mental illness: Review and update. *World Psychiatry*, 15(1), 13–20. 10.1002/wps.20306 [PubMed: 26833597]
- Eckshtain D, Kuppens S, Ugueto A, Ng MY, Vaughn-Coaxum R, Corteselli K, & Weisz JR (2020). Meta-analysis: 13-year follow-up of psychotherapy effects on youth depression. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(1), 45–63. 10.1016/j.jaac.2019.04.002 [PubMed: 31004739]
- Eslinger J, Sprang G, Ascienzo S, & Silman M (2020). Fidelity and sustainability in evidence-based treatments for children: An investigation of implementation determinants. *Journal of Family Social Work*, 23(2), 177–196. 10.1080/10522158.2020.1724581
- Fawley-King K, Haine-Schlagel R, Trask EV, Zhang J, & Garland AF (2013). Caregiver participation in community-based mental health services for children receiving outpatient care. *The Journal of Behavioral Health Services & Research*, 40(2), 180–190. 10.1007/s11414-012-9311-1 [PubMed: 23250770]
- Garland A, Brookman-Frazee L, & McLeod B (2008). Scoring manual for the PRAC study therapy process observational coding system for child psychotherapy: Strategies scale. San Diego: Child and Adolescent Services Research Center.
- Garland AF, Haine-Schlagel R, Brookman-Frazee L, Baker-Ericzen M, Trask E, & Fawley-King K (2013). Improving community-based mental health care for children: translating knowledge into action. *Administration and Policy in Mental Health and Mental Health Services Research*, 40(1), 6–22. 10.1007/s10488-012-0450-8 [PubMed: 23212902]
- Garland Ann, Brookman-Frazee L, Hurlburt M, Accurso E, Zoffness R, Haine-Schlagel R, & Ganger W (2010). Mental health care for children with disruptive behavior problems: a view inside therapists' offices. *Psychiatric Services*, 61(8). 10.1176/appi.ps.61.8.788
- Gellatly R, Brookman-Frazee L, Barnett M, Gonzalez JC, Kim JJ, & Lau AS (2018). Therapist reports of EBP client engagement challenges in sessions with diverse youth and families in community mental health settings. *Child & Youth Care Forum*, 0123456789. 10.1007/s10566-018-9472-z
- Gopalan G, Goldstein L, Klingenstein K, Sicher C, Blake C, & McKay MM (2010). Engaging families into child mental health treatment: updates and special considerations. *Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie Canadienne de Psychiatrie de l'enfant et de l'adolescent*, 19(3), 182–196.
- Guan K, Lau AS, Zhang A, Chlebowski C, Haine-Schlagel R, & Brookman-Frazee L (2019). In-session caregiver behaviors during evidence-based intervention delivery for children with asd in community mental health services. *Evidence-Based Practice in Child and Adolescent Mental Health*, 4(1), 55–71. 10.1080/23794925.2019.1565500 [PubMed: 31263772]
- Haine-Schlagel R, Martinez JI, Roesch SC, Bustos CE, & Janicki C (2016). Randomized trial of the parent and caregiver active participation toolkit for child mental health treatment. *Journal of Clinical Child and Adolescent Psychology*, 00(00), 1–11. 10.1080/15374416.2016.1183497

- Haine-Schlagel R, & Walsh NE (2015). A review of parent participation engagement in child and family mental health treatment. *Clinical Child and Family Psychology Review*, 18(2), 133–150. 10.1007/s10567-015-0182-x [PubMed: 25726421]
- Hayes AF (2006). A primer on multilevel modeling. *Human Communication Research*, 32(4), 385–410. 10.1111/j.1468-2958.2006.00281.x
- Jensen-Doss A, Hawley KM, Lopez M, & Osterberg LD (2009). Using evidence-based treatments: the experiences of youth providers working under a mandate. *Professional Psychology: Research and Practice*, 40(4), 417–424. 10.1037/a0014690
- Karver MS, Handelsman JB, Fields S, & Bickman L (2005). A theoretical model of common process factors in youth and family therapy. *Mental Health Services Research*, 7(1), 35–51. 10.1007/s11020-005-1964-4 [PubMed: 15832692]
- Kim JJ, Brookman-Frazee L, Gellatly R, Stadnick N, Barnett ML, & Lau AS (2018). Predictors of burnout among community therapists in the sustainment phase of a system-driven implementation of multiple evidence-based practices in children’s mental health. *Professional Psychology: Research and Practice*, 49(2), 132141. 10.1037/pro0000182
- Lau A, Lind T, Cox J, Motamedi M, Lui J, Roesch S, Stadnick N, & Brookman-Frazee L (2020). Predictors of therapist use of EBP-concordant strategies in a multi-EBP implementation context. [Unpublished manuscript] University of California, Los Angeles; University of California, San Diego.
- Lau AS, & Brookman-Frazee L (2016). The 4KEEPS study: identifying predictors of sustainment of multiple practices fiscally mandated in children’s mental health services. *Implementation Science*, 11(1), 31. 10.1186/s13012-016-0388-4 [PubMed: 26956621]
- Lau AS, Gonzalez JC, Barnett ML, Kim JJ, Saifan D, & Brookman-Frazee L (2018). Community therapist reports of client engagement challenges during the implementation of multiple ebps in children’s mental health. *Evidence-Based Practice in Child and Adolescent Mental Health*, 3(3), 197–212. 10.1080/23794925.2018.1455545 [PubMed: 31263771]
- Marques L, Dixon L, Valentine SE, Borba CPC, Simon NM, & Wiltsey Stirman S (2016). Providers’ perspectives of factors influencing implementation of evidence-based treatments in a community mental health setting: a qualitative investigation of the training-practice gap. *Psychological Services*, 13(3), 322–331. 10.1037/ser0000087 [PubMed: 27281696]
- Mauricio AM, Rudo-Stern J, Dishion TJ, Letham K, & Lopez M (2019). Provider readiness and adaptations of competency drivers during scale-up of the family check-up. *The Journal of Primary Prevention*, 40(1), 51–68. 10.1007/s10935-018-00533-0 [PubMed: 30631998]
- Mennies RJ, Birk SL, Norris LA, & Olino TM (2020). The main and interactive associations between demographic factors and psychopathology and treatment utilization in youth: a test of intersectionality in the abcd study. *Journal of Abnormal Child Psychology*, 5–17. 10.1007/s10802-020-00687-8
- Morrissey-Kane E, & Prinz RJ (1999). Engagement in child and adolescent treatment: the role of parental cognitions and attributions. *Clinical Child and Family Psychology Review*, 2(3), 183–198. 10.1023/a:1021807106455 [PubMed: 11227074]
- Nock MK, & Ferriter C (2005). Parent management of attendance and adherence in child and adolescent therapy: a conceptual and empirical review. *Clinical Child and Family Psychology Review*, 8(2), 149–166. 10.1007/s10567-005-4753-0 [PubMed: 15984084]
- Park AL, Tsai KH, Guan K, & Chorpita BF (2018). Unintended consequences of evidence-based treatment policy reform: is implementation the goal or the strategy for higher quality care? *Administration and Policy in Mental Health and Mental Health Services Research*, 45(4), 649–660. 10.1007/s10488-018-0853-2 [PubMed: 29445993]
- Patterson GR, & Chamberlain P (1994). A functional analysis of resistance during parent training therapy. *Clinical Psychology: Science and Practice*, 1(1), 53–70. 10.1111/j.1468-2850.1994.tb00006.x
- Pickard K, Rowless S, & Ingersoll B (2019). Understanding the impact of adaptations to a parent-mediated intervention on parents’ ratings of perceived barriers, program attributes, and intent to use. *Autism*, 23(2), 338–349. 10.1177/1362361317744078 [PubMed: 29172633]

- Piotrowska PJ, Tully LA, Lenroot R, Kimonis E, Hawes D, Moul C, Frick PJ, Anderson V, & Dadds MR (2017). Mothers, fathers, and parental systems: a conceptual model of parental engagement in programmes for child mental health—connect, attend, participate, enact (CAPE). *Clinical Child and Family Psychology Review*, 20(2), 146–161. 10.1007/s10567-016-0219-9 [PubMed: 27914017]
- Prinz RJ, & Miller GE (1994). Family-based treatment for childhood antisocial behavior: experimental influences on dropout and engagement. *Journal of Consulting and Clinical Psychology*, 62(3), 645–650. 10.1037/0022-006X.62.3.645 [PubMed: 8063993]
- Quetsch LB, Girard EI, & McNeil CB (2020). The impact of incentives on treatment adherence and attrition: A randomized controlled trial of Parent-Child Interaction Therapy with a primarily Latinx, low-income population. *Children and Youth Services Review*, 112(October 2019), 104886. 10.1016/j.childyouth.2020.104886
- Regan J, Lau AS, Barnett M, Stadnick N, Hamilton A, Pesanti K, Bando L, & Brookman-Frazee L (2017). Agency responses to a system-driven implementation of multiple evidence-based practices in children’s mental health services. *BMC Health Services Research*, 17(1), 671. 10.1186/s12913-017-2613-5 [PubMed: 28927407]
- Rodriguez A, Lau AS, Wright B, Regan J, & Brookman-Frazee L (2018). Mixed-method analysis of program leader perspectives on the sustainment of multiple child evidence-based practices in a system-driven implementation. *Implementation Science*, 13(1), 1–14. 10.1186/s13012-018-0737-6 [PubMed: 29301543]
- Rubin RM, Hurford MO, Hadley T, Matlin S, Weaver S, & Evans AC (2016). Synchronizing watches: the challenge of aligning implementation science and public systems. *Administration and Policy in Mental Health and Mental Health Services Research*, 43(6), 1023–1028. 10.1007/s10488-016-0759-9 [PubMed: 27511103]
- Ruiz BS, Korchmaros JD, Greene A, & Hedges K (2011). Evidence-based substance abuse treatment for adolescents: Engagement and outcomes. *Practice*, 23(4), 215–233. 10.1080/09503153.2011.597207
- Saifan D, Brookman-Frazee L, Barnett M, Gonzalez JC, & Lau AS (2018). Ethnic minority community therapists’ acculturation and reported adaptations to children’s evidence-based practices. *Cultural Diversity and Ethnic Minority Psychology*, 24(4), 530–540. 10.1037/cdp0000203 [PubMed: 29963881]
- Schoenwald SK, Garland AF, Chapman JE, Frazier SL, Sheidow AJ, & Southam-Gerow MA (2012). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 32–43. 10.1007/s10488-010-0321-0.Toward
- Sibley MH, Graziano PA, Bickman L, Coxe SJ, Martin P, Rodriguez LM, Fallah N, & Ortiz M (2020). Implementing parent-teen motivational interviewing + behavior therapy for ADHD in community mental health. *Prevention Science*. 10.1007/s11121-020-01105-7
- Southam-Gerow MA, Chorpita BF, Miller LM, & Gleacher AA (2008). Are children with anxiety disorders privately referred to a university clinic like those referred from the public mental health system? *Administration and Policy in Mental Health and Mental Health Services Research*, 35(3), 168–180. 10.1007/s10488-007-0154-7 [PubMed: 18046640]
- Spielmanns GI, Gatlin ET, & McFall JP (2010). The efficacy of evidence-based psychotherapies versus usual care for youths: Controlling confounds in a meta-reanalysis. *Psychotherapy Research*, 20(2), 234–246. 10.1080/10503300903311293 [PubMed: 19856234]
- StataCorp. (2017). *Stata Statistical Software: Release 15*. 10.2307/2234838
- Staudt M (2007). Treatment engagement with caregivers of at-risk children: gaps in research and conceptualization. *Journal of Child and Family Studies*, 16(2), 183–196. 10.1007/s10826-006-9077-2
- Walker SC, Sedlar G, Berliner L, Rodriguez FI, Davis PA, Johnson S, & Leith J (2019). Advancing the state-level tracking of evidence-based practices: A case study. *International Journal of Mental Health Systems*, 13(1), 1–9. 10.1186/s13033-019-0280-0 [PubMed: 30622627]
- Wanous JP, & Hudy MJ (2001). Single-item reliability: a replication and extension. *Organizational Research Methods*, 4(4), 361–375. 10.1177/109442810144003

- Wanous John P, & Reichers AE (1996). Estimating the reliability of a single-item measure. *Psychological Reports*, 78(2), 631–634. 10.2466/pr0.1996.78.2.631
- Weisz JR, Jensen-Doss A, & Hawley KM (2006). Evidence-based youth psychotherapies versus usual clinical care: a meta-analysis of direct comparisons. *American Psychologist*, 61(7), 671–689. 10.1037/0003-066X.61.7.671
- Weisz JR, Kuppens S, Eckshtain D, Ugueto AM, Hawley KM, & Jensen-Doss A (2013). Performance of evidence-based youth psychotherapies compared with usual clinical care. *JAMA Psychiatry*, 70(7), 750. 10.1001/jamapsychiatry.2013.1176 [PubMed: 23754332]
- Weisz JR, Kuppens S, Ng MY, Eckshtain D, Ugueto AM, Vaughn-Coaxum R, Jensen-Doss A, Hawley KM, Krumholz Marchette LS, Chu BC, Weersing VR, & Fordwood SR (2017). What five decades of research tells us about the effects of youth psychological therapy: a multilevel meta-analysis and implications for science and practice. *American Psychologist*, 72(2), 79–117. 10.1037/a0040360
- Weisz JR, Ng MY, & Bearman SK (2014). Odd couple? Reenvisioning the relation between science and practice in the dissemination-implementation era. *Clinical Psychological Science*, 2(1), 58–74. 10.1177/2167702613501307
- Wiltsey Stirman S, Baumann AA, & Miller CJ (2019). The FRAME: An expanded framework for reporting adaptations and modifications to evidence-based interventions. *Implementation Science*, 14(1), 58. 10.1186/s13012-019-0898-y [PubMed: 31171014]
- Wright B, Lau AS, & Brookman-Frazee L (2019). Factors associated with caregiver attendance in implementation of multiple evidence-based practices in youth mental health services. *Psychiatric Services*, 70(9), 808–815. doi:10.1176/appi.ps.201800443 [PubMed: 31159663]
- Zeman J, Cassano M, Perry-Parrish C, & Stegall S (2006). Emotion regulation in children and adolescents. *Journal of Developmental & Behavioral Pediatrics*, 27(2), 155–168. 10.1097/00004703-200604000-00014

Table 1

Therapist, Youth, and Session Characteristics

	Overall Sample	Youth-present Sample	Caregiver-present Sample
Therapist Characteristics			
Gender, <i>N</i> (%)			
Female	90 (88.24)	69 (85.19)	40 (97.56)
Male	12 (11.76)	12 (14.81)	1 (2.44)
Race-ethnicity, <i>N</i> (%)			
Latinx	57 (55.88)	42 (51.85)	24 (58.54)
Other racial-ethnic group	24 (23.53)	22 (27.16)	8 (19.51)
Non-Hispanic White	21 (20.59)	17 (20.99)	9 (21.95)
Licensure, <i>N</i> (%)			
Yes	20 (19.61)	15 (18.52)	8 (19.51)
No	82 (80.39)	66 (81.48)	33 (80.49)
Discipline, <i>N</i> (%)			
Marriage and family therapist	51 (50.00)	43 (53.09)	18 (43.90)
Psychologist	13 (12.75)	11 (13.58)	7 (17.07)
Social worker	35 (34.31)	25 (30.86)	14 (34.15)
Other	3 (2.94)	2 (2.47)	2 (4.88)
Education, <i>N</i> (%)			
Below Master's	4 (3.92)	2 (2.47)	3 (7.32)
Master's	87 (85.29)	70 (86.42)	32 (78.05)
Doctoral	11 (10.78)	9 (11.11)	6 (14.63)
Clients in caseload, <i>M</i> (<i>SD</i>)	17.17 (6.94)	17.07 (6.92)	17.41 (6.34)
Perceptions of EBP delivered, <i>M</i> (<i>SD</i>)	3.75 (.81)	3.54 (.57)	3.61 (.64)
Youth Characteristics			
Age, <i>M</i> (<i>SD</i>) ^a	9.85 (3.83)	10.69 (3.11)	7.95 (3.87)
Gender, <i>N</i> (%)			
Female	138 (51.69)	124 (56.62)	40 (35.40)
Male	129 (48.31)	95 (43.38)	73 (64.60)
Race-ethnicity, <i>N</i> (%)			
Latinx	191 (71.54)	154 (70.32)	81 (74.31)
Other racial-ethnic group	63 (23.60)	54 (24.66)	22 (20.18)
Non-Hispanic White	13 (4.87)	11 (5.02)	6 (5.50)
Session Characteristics			
Session type by participant(s), <i>N</i> (%)			
Youth only	386 (57.96)	386 (72.15)	-
Youth and caregiver	226 (33.93)	149 (27.85)	226 (80.71)
Caregiver only	54 (8.11)	-	54 (19.29)
Problem Focus of Session, <i>N</i> (%)			

	Overall Sample	Youth-present Sample	Caregiver-present Sample
Anxiety	111 (16.67)	103 (19.25)	40 (14.29)
Conduct	181 (27.18)	129 (24.11)	103 (36.79)
Trauma	291 (43.69)	225 (42.06)	122 (43.57)
Depression	83 (12.46)	78 (14.58)	15 (5.36)

^aYouth 5 years old excluded from analyses for Youth-present Sample

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 2
Predictors of the Two Types of Youth Engagement Challenges and Caregiver Expressed Concerns

Predictors	Youth Expressed Concerns			Youth Disruptive Behaviors			Caregiver Expressed Concerns		
	B (SE)	LL	UL	B (SE)	LL	UL	B (SE)	LL	UL
Session Factors									
EBP prescribed session content/order	-.18(.13)	-.43	.07	-.13(.14)	-.41	.15	.37(.13)**	.12	.62
Caregiver present in session	-.07(.08)	-.22	.08	.18(.07)*	.03	.32	-	-	-
Youth present in session	-	-	-	-	-	-	-.20(.12)	-.44	.03
Client Factors									
Client age ^a	-	-	-	-	-	-	-	-	-
6–12 years old	-	-	-	-	-	-	-.22(.12) [‡]	-.45	.01
13+ years old	.29(.08)**	.14	.44	-.29(.09)**	-.46	-.11	-.03(.17)	-.37	.30
Client gender (reference: Female)	-	-	-	-	-	-	-	-	-
Male	.02(.07)	-.12	.15	.19(.08)*	.04	.34	.07(.09)	-.11	.26
Client race/ethnicity (reference: Not Latinx)	-	-	-	-	-	-	-	-	-
Latinx	-.07(.08)	-.24	.09	-.18(.09)*	-.37	-.003	-.11(.12)	-.33	.12
Therapist Factors									
Therapist race/ethnicity (reference: Latinx)	-	-	-	-	-	-	-	-	-
Non-Hispanic White	.07(.10)	-.12	.26	-.11(.11)	-.32	.10	-.19(.13)	-.44	.06
Other race/ethnicity ^a	-.01(.09)	-.18	.17	-.18(.10) [‡]	-.38	.01	-.06(.15)	-.34	.23
Therapist licensed	.08(.09)	-.10	.25	-.20(.10)*	-.39	-.01	-.10(.13)	-.35	.16
Clients in caseload	-.01(.01)*	-.02	-.001	-.01(.01)	-.02	.003	-.02(.01) [‡]	-.03	.0002

Note. CI = confidence interval; LL = lower limit; UL = upper limit; all models included session problem focus as a covariate.

^aFor Youth Engagement Challenges, reference is 6–12 years old and for Caregiver Expressed Concerns reference is <6 years old.

[‡] $p < .10$

* $p < .05$

$p < .10$
**

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Engagement Challenges as Predictors of Therapist-Reported Ability to Carry out Planned Session Activities

Table 3

Predictors	Youth-Present Model ^d		Caregiver-Present Model ^b	
	B (SE)	95% CI	B (SE)	95% CI
Youth Expressed Concerns	-.05(.06)	-.17 .08	-	-
Youth Disruptive Behaviors	-.12(.09)	-.25 .02	-	-
Caregiver Expressed Concerns	-	-	-.21(.09) *	-.39 -.02

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

^aModel covariates: EBP prescribed session content/order, session focus, caregiver presence, client age, client gender, client race/ethnicity, therapist licensure status, therapist caseload, and therapist perceptions of EBP delivered (PCIS).

^bModel covariates: EBP prescribed session content/order, session focus, youth presence, and therapist perceptions of EBP delivered (PCIS).

* $p < .05$.

Table 4
Engagement Challenges as Predictors of Observer-Rated Therapy EBP Strategy Delivery

Predictors	Youth-Present Model ^a					Caregiver-Present Model ^b					
	Observer-ECCA Content		Observer-ECCA Technique			Observer-ECCA Content		Observer-ECCA Technique			
	B (SE)	95% CI	LL	UL	B (SE)	95% CI	LL	UL	B (SE)	95% CI	
Youth Expressed Concerns	.04(.03)		-.02	.09	-.01(.05)	-.11	.09				
Youth Disruptive Behaviors	-.01(.03)		-.07	.05	.02(.06)	-.08	.13				
Caregiver Expressed Concerns									.08(.04)*	.01	.15
										.06(.07)	-.08

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

^aModel covariates: EBP prescribed session content/order, session focus, caregiver presence, client age, client gender, client race/ethnicity, therapist licensure status, and therapist caseload.

^bModel covariates: EBP prescribed session content/order, session focus, and youth presence.

* $p < .05$.