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# Qualitative Reports of How and When Therapists Adapt Children's Evidence-Based Practices during Community Implementation

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This study analyzed qualitative therapist reports of adaptations to the delivery of multiple evidence-based practices (EBPs) within the context of a system-driven reform of children's community mental health services to understand how therapists adapt EBPs as well as contexts of these adaptations to identify when these adaptations are made. The study sought to complement and expand upon previous quantitative survey findings of two categories of Augmenting and Reducing/Reordering adaptations to EBPs. Data included interviews from 60 therapists (88.3% female, 61.7% Latina/o, 80.0% unlicensed) across 20 program sites in 11 mental health agencies that served racial/ethnically diverse children. Interviews were coded to identify themes surrounding the types of adaptations made and the contexts for these adaptations. The majority of therapists' qualitative descriptions of adaptations converged with the 2 broad categories in the Augmenting and Reducing/Reordering Framework, with therapists describing augmenting (e.g., modifying presentation, lengthening or extending pacing) most often, and reducing/reordering adaptations were discussed less frequently. Child and family characteristics were most frequently cited as indications prompting adaptations; however, the specific characteristics motivating adaptations differed by type. Therapists reporting using augmenting adaptations in the context of a wide range of client characteristics,

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whereas reducing/reordering adaptations occurred more specifically as a function of clinical presentation, family and caregiver functioning, and emergent life events. Therapists described making adaptations to improve the fit of multiple EBPs for the clients they served. Findings could have implications for implementation efforts with diverse clients served in community settings.

Evidence-based practices (EBPs) are increasingly being implemented in community mental health systems across the United States (Hoagwood et al., 2014; McHugh & Barlow, 2010; Southam-Gerow et al., 2014). Clients in community settings are more likely to be from racial or ethnic minority backgrounds, have a lower socioeconomic status, and present with higher rates of clinical comorbidity than participants in controlled trials (Southam-Gerow, Marder, & Austin, 2008). Given these differences, community therapists may feel the need to adapt EBPs to improve their fit for the clients they serve (Aarons et al., 2012; Kumpfer, Magalhães, & Xie, 2017). Although fidelity is recognized as an important component of high-quality care (Drake, Bond, & Rapp, 2006), tensions still exist between delivering EBPs with fidelity and making adaptations to fit the local implementation context. In fact, the adaptation of EBPs has been identified as inevitable to the implementation process (Rogers, 1962, 2003).

Due to the inevitability and necessity of adaptations to improve intervention fit for diverse contexts, Chambers and Norton (2016) called for the development of an "adaptome," a data platform that identifies adaptations to EBPs and their impacts on patient and implementation outcomes. This extends upon the Dynamic Adaptation Process, which is an implementation approach that partners with providers to plan for allowable adaptations to EBPs to improve fit for organizations and clients (Aarons et al., 2012). The adaptome may be especially relevant for observational studies of implementation-as-usual during large-scale EBP mandates. Indeed, Chambers and Norton (2016) argued that studying adaptation within the context of local implementation efforts would "dwarf the evidence gathered about evidence-based practices through clinical trials, leading to a more robust understanding of how to optimize effective interventions over time" (p. S127). To develop this adaptome, it is critical to characterize both the types of adaptations community therapists make and the contexts in which they identify making these adaptations (Aarons et al., 2012; Baumann, Cabassa, & Stirman, 2017; Baumann et al., 2015; Cabassa & Baumann, 2013; Chambers & Norton, 2016). This is especially important for understanding how to increase the accessibility of culturally appropriate EBPs in settings that serve ethnically and racially diverse clients (Baumann et al., 2017; Cabassa & Baumann, 2013). Therefore, the current study employed qualitative interviews to characterize how and when community therapists adapt EBPs for racially and ethnically diverse children and families within a systemdriven implementation in children's mental health services.

Multiple frameworks have been developed to classify adaptations to EBPs made by therapists delivering care in community service settings (Lau et al., 2017; Stirman, Miller, Toder, & Calloway, 2013). Stirman et al.'s (2013) and Stirman et al.'s (2015) framework classifies adaptations as being "fidelity-consistent" or "fidelity-inconsistent." Fidelity-consistent adaptations do not alter the core elements of the intervention and include tailoring the presentation, adding new material or strategies consistent with the EBP that was being delivered, and shortening or lengthening the sessions or treatment episode without removing core elements. In contrast, fidelity-inconsistent modifications include removing core components or loosening the structure. In this framework, adaptations can occur for different reasons at various levels, including the client level (e.g., changing terminology to fit with an individual's cognitive level), population level (e.g., developing worksheets for all individuals in a particular ethnic group), or provider level (e.g., consistently removing a component of an EBP for all clients due to therapist preference; Baumann et al., 2017; Stirman et al., 2013).

However, because EBPs range in the degree of prescriptive structure, modifications that involve omitting or re-ordering treatment elements may remain compatible with integrity to some protocols, particularly those that use a modular or "toolbox" approach (Borntrager, Chorpita, Higa-McMillan, & Weisz, 2015; Chorpita & Daleiden, 2009; Najavits, 2002). Recently, Lau and colleagues (2017) expanded the work of Stirman et al. (2013) and Stirman et al. (2015) and characterized therapist-reported adaptations within the context of system-driven implementation of multiple EBP in children's mental health services. A sample of 572 community therapists reported on the types of modifications they made to six EBPs on the Adaptations to Evidence-Based Practices Scale (AES). A confirmatory factor analysis of the AES revealed two subscales corresponding to Augmenting and Reducing/Reordering adaptations. Augmenting adaptations reflected therapist engagement by adding to the EBP in some way (i.e., tailoring presentation of strategies, integrating supplemental content, and lengthening the treatment or slowing the pacing), whereas reducing/reordering adaptions appeared to reflect disengagement from some elements or structure of the original practice (i.e., omitting components, reordering components, or shortening the treatment or quickening the pacing). On this scale, therapists reported more augmenting adaptations than reducing/reordering adaptations across five different EBPs.

As recognized by Chambers and Norton (2016), it is not adequate to only identify the types of adaptations made within community implementation efforts, it is also necessary to understand the contextual influences on why these adaptations occur. To date, the majority of observational research on adaptations within implementation science focuses on provider-level contexts associated with different types of adaptations (Lau et al., 2017; Stirman et al., 2015). In the Lau et al. (2017) study, Latino therapists and therapists with fewer years of experience reported more extensive augmenting adaptations, whereas no therapist background characteristics were associated with reducing/reordering adaptations. Therapist attitudes toward EBPs have also been associated with reported adaptations (Lau et al., 2017; Stirman et al., 2015). For example, therapists with negative perceptions toward the specific EBP predicted greater reducing/reordering adaptations but not augmenting adaptations (Lau et al., 2017). Implementation research needs to move beyond solely identifying therapist characteristics associated with different types of adaptations and begin to identify the client characteristics that therapists identify as necessitating adaptations (Chambers & Norton, 2016).

Traditionally, when there has been an identified mismatch between an EBP and the clients being served due to race, ethnicity, language, age, or diagnosis, there have been research efforts to adapt the EBP and test these adaptations within an effectiveness trial (e.g., BigFoot & Schmidt, 2010; Cohen, Mannarino, & Staron, 2006; Domenech Rodríguez, Baumann, & Schwartz, 2011; Lau, 2012). Cultural adaptations of EBPs within effectiveness trials have largely used an augmentation approach, including using relevant idioms or metaphors to frame interventions, addressing known risk factors for disorder in the target community, or lengthening the treatment to provide more opportunities to rehearse and consolidate culturally unfamiliar skills (Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009; Chu & Leino, 2017; Lau, 2006). On the other hand, reducing/ reordering adaptations has been highlighted as necessary to address different clinical diagnoses and developmental levels. For example, teaching discipline procedures (i.e., time-out) has been removed from an adaptation of Parent-Child Interaction Therapy for infants and toddlers, as these strategies are not developmentally appropriate for children younger than 2 (Bagner et al., 2016; Bagner, Rodríguez, Blake, & Rosa-Olivares, 2013). Furthermore, modular and transdiagnostic treatment protocols have been developed that allow therapists to flexibly deliver content to meet the needs of clients with heterogeneous clinical presentations (e.g., Barlow et al., 2017; Chorpita & Daleiden, 2009). Although effectiveness trials have added to the evidence base on interventions and the impact of adaptations, multiple challenges remain for the field. First, it is challenging, if not impossible, to develop, test, and disseminate specific adaptations for every population served, which could limit the public health impact of adapted EBPs (Cabassa & Baumann, 2013; St. George et al., 2017; Stirman, Gamarra, Bartlett, Calloway, & Gutner, 2017). Further, effectiveness trials of adaptations do not address that EBPs are being adapted all of the time in real-world settings, and as a field we have minimal understanding of how these ongoing adaptations impact implementation and individual outcomes (Chambers & Norton, 2016).

#### CONTEXT OF CURRENT STUDY

In response to Chambers and Norton's (2016) call to measure types of and contexts for adaptations when the "rubber meets the road," the current study took place within the context of large-scale reform of children's mental health services in the Los Angeles County Department of Mental Health (LACDMH), the largest county mental health department in the United States, which predominately serves ethnic minority clients. Beginning in 2009, community mental health agencies were offered the opportunity for reimbursement for delivery of a number of EBPs through the Prevention and Early Intervention (PEI) Transformation launched by LACDMH. Implementation supports (i.e., training, consultation, and technical support) were provided by LACDMH for six child and adolescent mental health evidence-based or informed practices, including Cognitive Behavioral Interventions for Trauma in Schools (CBITS), Child-Parent Psychotherapy, Managing and Adapting Practices, Seeking Safety, Trauma-Focused Cognitive Behavior Therapy (TF-CBT), and Positive Parenting Program. To demonstrate the scope of the reform, between 2010 and 2014, 8,514 therapists provided one of these six EBPs to 87,100 clients (Brookman-Frazee et al., 2016). The PEI Transformation provides a diverse, natural laboratory to study therapist adaptations to multiple EBPs.2016

The purpose of the current study was to gain a depth of understanding of *how* therapists adapt multiple EBPs as well the contexts for *when* these adaptations were made within the sustainment period of a large-scale implementation effort. Qualitative methods allowed us to gather in-depth descriptions of the adaptations made and to identify whether additional types of emerged beyond those previously assessed by the AES measure. Finally, we examined how the different types of adaptations were associated with different contexts and motivations as described by community therapists.

#### METHOD

#### Procedures

Qualitative data for the present study were collected as part of the In-Depth portion of the Knowledge Exchange on Evidence-based Practice Sustainment (4KEEPS) research project (Lau & Brookman-Frazee, 2016), which aimed to examine how multiple EBPs were sustained within the context of this large-scale system reform. Fourteen agencies, representing 28 program sites across Los Angeles County, were enrolled in the In-Depth portion of the study, which entailed both in-session audio-recordings of therapists delivering one of the six practices and a 1-hr in-person interview with the same sample of therapists. Therapists also completed surveys related to their demographic characteristics and experiences implementing the practices. Therapists received \$20 gift cards for completing surveys and \$40 gift cards for interviews. Institutional Review Boards at LACDMH and University of California, Los Angeles approved all procedures for this study.

#### Participants

Semistructured interviews were conducted with 123 therapists. Purposeful sampling of interviews for coding was used to ensure variation in the EBPs that were delivered and provide enough interviews to reach saturation, or the point where codes, themes, and subthemes were fully developed (Palinkas, 2014). Given the different rates of utilization of the EBPs, some practices were discussed more frequently than others; hence we drew a stratified random sample of 60 therapist interviews for qualitative coding. We first stratified therapists by the EBPs discussed in their interviews, and then we sequentially selected therapist interviews starting with the least prevalent EBP discussed until a quota of at least 15 therapist interviews per EBP were selected. However, we were not able to maintain CBITS as a focus because of low rates of penetration and sustainment of this practice within the context of the PEI Transformation (Brookman-Frazee et al., 2016). During each interview, therapists discussed an average of 2.23 (SD = .67) EBPs: 18 therapists discussed Child-Parent Psychotherapy, one discussed CBITS, 35 discussed TF-CBT, 17 discussed Positive Parenting Program, 35 discussed Managing and Adapting Practices, and 26 discussed Seeking Safety. Because therapists typically discussed two or more practices in an interview. certain EBPs were discussed more frequently across therapists than other EBPs. Adaptations were coded for every EBP that therapists discussed.

The 60 therapists selected to have their interview transcripts coded and analyzed worked in 20 program sites within 11 agencies. On average, the number of therapists drawn from each agency was 5.45 (SD = 3.7). The majority of therapists were female (88.3%), Latina/o (61.7%), and unlicensed (80.0%), and they held a master's degree (86.7%). Therapists ranged from 25 to 62 years old (M = 36.12, SD = 9.38). Therapists reported having worked an average of 4.37 (SD = 4.0) years as a practicing therapist. There were no significant differences in therapist gender, ethnicity, licensure status, or degree between therapists selected to have their interview transcripts analyzed and those who were not selected to have their interviews analyzed. Table 1 reports on therapist background and professional characteristics.

#### Measures

#### Therapist Characteristics

Questions about therapist characteristics were asked in an online survey and derived from a measure used previously in an effectiveness and implementation trial of a treatment for children with autism spectrum disorder (Brookman-Frazee, Drahota, & Stadnick, 2012). Therapists completed

TABLE 1 Therapist Demographics and Professional Characteristics

	N	% or M(SD)
Age		36.12 (9.38)
Gender		
Female	53	88.3
Male	7	11.7
Race/Ethnicity		
Hispanic/Latino	37	61.7
Non-Hispanic White	11	18.3
Black	6	10.0
Asian/Pacific Islander	5	8.3
Multiracial	1	1.7
Additional Languages for Service Delivery		
Spanish	32	53.3
None (Only English)	26	43.3
Other language	2	3.3
Primary discipline		
Marriage and Family Therapy	34	56.7
Social Work	17	28.3
Psychology	8	13.3
Other	1	1.7
Licensed		
No	48	80.0
Yes	12	20.0
Education Level		
Master's degree	52	86.7
Doctoral degree	6	10.0
< Master's degree	2	3.3
Primary service setting		
Outpatient	43	71.7
School	9	15.0
Community (i.e., home, field-based)	3	5.0
Inpatient	2	3.3
Group Home	1	1.7
Other	2	3.3
Years as therapist		4.37 (3.63)
Clients in caseload		17.75 (7.51)

questions about their personal and professional characteristics, including age, gender, race/ethnicity, licensure status, primary theoretical orientation, highest degree obtained, caseload, years of experience as a therapist, and years at their current agency.

#### Semistructured Interview Guides

As part of a larger interview related to perceptions of and experiences with the EBPs of interest, therapists were asked a series of questions related to the adaptations they made to individual EBPs. The interview followed a funnel approach with broader questions asked first, followed by more specific follow-up probes (Spradley, 1979). The interview guide started by asking whether therapists made any adaptations to each EBP delivered (e.g., "Have you had to make any adaptations to this EBP? If so, what kinds of adaptations?). Once therapists provided a response to the general question, interviewers followed up with probes as needed concerning whether therapists added or omitted components, adjusted the pacing or length, or modified the presentation (i.e., terminology or framing). Therapists were asked to describe specific instances/cases that illustrated the adaptations they mentioned and were asked for whom such adaptations were made and/or why the adaptations were made.

#### Data Analysis Plan

Qualitative analyses followed the methodology of coding, consensus, co-occurrence, and comparison and followed recommendations for conducting qualitative analyses within mental health services and implementation research (Palinkas, 2014; Willms et al., 1990). All interviews were transcribed and uploaded using QSR International's NVivo 11 Software. A codebook was developed with a priori codes based on the AES framework with six codes for types of adaptations (e.g., extend pacing, tailor presentation) and eight codes for contextual reasons (e.g. culture, developmental level) for adaptations (Baumann et al., 2017; Lau et al., 2017). The coding team consisted of two master coders (i.e., cotrainers) and three research assistant coders. Regular meetings occurred with the coding team to discuss procedures for assigning codes to segments of interview data, examine coding across analysts, and resolve differences in coding. These procedures represent a conventional qualitative approach, which is frequently employed in implementation studies (Aarons & Palinkas, 2007; Hamilton, Chinman, Cohen, Oberman, & Young, 2015; Palinkas, 2014). Consensus processes allow for an iterative refinement of code definitions and the logic of the coding tree, as well as collaborative development of themes (Hamilton et al., 2015; Palinkas, 2014). After initial review of the interview transcripts, four codes were added-two related to type of adaptation (i.e., setting and participants), and two related to reasons for adaptations (i.e., youth/caregiver engagement, emergent life events). Table 2 provides code names and definitions.

Four transcripts served as "gold standard" transcripts, which were first coded and discussed by the two master coders until consensus was reached. Then the master coders trained the three coders to use the codebook and coded the gold standard transcripts, after which the coders and master coders discussed the codes and refined the codebook until reaching consensus. The remaining 56 transcripts were divided among coders to be independently coded following the training phase. Fifty percent of all independently coded transcripts were randomly selected to be reviewed by the master coders, and discrepancies were resolved through discussion. Qualitative themes were identified with all of the authors on the research team through analysis of co-occurring codes and text analysis.

 TABLE 2

 Code Definitions for Types of and Contexts for Adaptations

Code	Definition
Types of Adaptations	
1. Modifying the Language, Terminology, or Presentation	Modification of the language or terminology (e.g. simplifying or translating) of the EBP or presenting the material in a different way (e.g., art activities).
2. Lengthening or Extending Pacing	Lengthening or extending the pacing of the EBP or specific practice elements in a session or across the course of treatment.
3. Integrating Supplemental Context or Strategies	Including supplemental content or strategies that were not included in the original EBP protocol.
4. Reducing and Omitting Components	Reducing the delivery of the EBP by omitting content or shortening/ condensing the pace of treatment.
5. Adjusting the Order	Elements of the EBP are delivered in a different order than originally delineated in the EBP protocol.
6. Modified Settings or Individuals	The EBP or practice elements are delivered in alternative settings (e.g., home-based, schools) or with alternative individuals (e.g., caregivers, teachers) than was described in the original EBP protocol.
7. Pausing EBP	Delivery of the EBP elements are paused to address other issues.
Contexts for Adaptations	
1. Culture	The race/ethnicity/religion or language translation of a specific client or a group of clients.
2. Client/Caregiver Literacy	The client or caregiver's literacy or education level.
3. Developmental Level	Age, maturity, or developmental abilities.
4. Youth Clinical Presentation	The youth's clinical symptoms, severity, or diagnoses.
5. Promoting Youth and Caregiver Engagement	Adaptations to increase client <i>and/or</i> caregiver engagement in session (e.g., making activities fun or relevant; addressing barriers to care).
5. Emergent Life Events	Unexpected and recent stressors that are disclosed during the session.
6. Personal Preferences	The therapist's previous training/ experiences, education, clinical orientation, or values/beliefs/attitudes.

*Note*: EBP = evidence-based practice.

### RESULTS

### Types of Adaptations

Consistent with the survey results from Lau et al. (2017) quantitative study, a majority of adaptations described by therapists during qualitative interviews reflected augmenting the EBPs that therapists delivered. Specifically, therapists described using three primary augmentations. First, almost every therapist described ways in which they *Modified the Language, Terminology, or Presentation* of EBPs. These

adaptations related to the language they used with clients (e.g., "... if I see something is worded one way, I might rephrase it when I tell it to them") as well as the activities they used to present materials (e.g., "I might introduce more visuals"). Second, the vast majority of therapists described adapting EBPs by Lengthening or Extending the Pacing of an EBP to ensure that clients mastered or understood the material (e.g., "When I think of adaptations, I think about the clients who I feel like I have to go over a certain practice element more than once, or maybe spend more time, or sometimes even revisit that practice."). Third, the majority of therapists discussed Integrating Supplemental Content or Strategies to the EBPs. They often described incorporating content from other EBPs they delivered. For example, a therapist said, "What I usually implement is parenting skills as well" in regards to an EBP that did not include caregiverdirected child behavior management.

Therapists less frequently described reducing or reordering adaptations; however, when this did occur, therapists described Reducing and Omitting Components of EBPs. For example, therapists discussed omitting exposure for anxiety and the trauma narrative of TF-CBT. Relatedly, therapists described Shortening their delivery of the content or Loosening the Structure (e.g., "We had our structure and sometimes we would run out of time, and we had a really difficult time delivering all of the curriculum, so I remember that we rushed through the end and sometimes we wouldn't follow the script, we would summarize the bullet points."). Less than half of therapists reported Adjusting the Order of EBP components they delivered (e.g., "Sometimes it's not just from [session] one to twelve, like you're going to have to jump around a bit and it's hard, because sometimes I forget and I'm like, oh, did I do this? But sometimes it's that we have to go with where they need it the most.").

In addition, some therapists described novel types of adaptation that could not be encompassed within the augmenting and reducing/reordering framework. Specifically, therapists described adaptations that modified the Settings in which the EBP was delivered and the Individuals involved in receiving the EBP. Therapists described that providing services in other settings outside of outpatient clinics, such as home or schools, reduced access barriers but also posed challenges to implementation (e.g., "Sometimes I'll say, 'Okay, I can go to the home. If you can't make it here to the office, I'll go to the home. We'll make it a time that's good for you, after work, or after you get home.' But then sometimes at the home environment, it's hard, too, because you've got other kids, you've got aunts and uncles and grandparents, and you can't really have that going on while they're sharing. It needs to be a very private space.").

Relatedly, some therapists described targeting additional individuals in the child's services, such as caregivers and teachers who might need to be incorporated into treatment even when the EBP content was child directed (e.g., "So,

you know, I have an extra collateral with them just to kind of get them to be comfortable. ... I've had lots of collaterals with parents either in person or over the phone."). In contrast, other therapists described including fewer individuals in the care than indicated in the EBP, particularly in EBPs requiring caregiver involvement. For example, for children without a stable home placement, therapists adapted caregiver-involved treatments to conduct child-focused therapy (e.g., "Kids in foster care would be probably a population where there are more adaptations that have to be made because they don't have the parent there."). Finally, therapists reported that at times they would *Pause* their delivery of EBP content to address other concerns that arose in treatment (e.g., "If they're going through more of a loss of a loved one, I think it's better to address the loss before heading into the trauma, itself. So, I found myself doinghaving to put that off for those clients, at times.").

### Contexts for Adaptations

The majority of contextual reasons that therapists discussed regarding when they made adaptations related to client characteristics across cultural background, developmental level, and clinical symptoms. As the majority of the clients served in LACDMH are from low-income, ethnic minority, and immigrant backgrounds, Culture (e.g., the client's race/ ethnicity, language, religion) was discussed frequently in relation to making adaptations (e.g., "Like I said, I use this with a lot of teenage cutters who use cutting as a coping skill, and I think for the population that I work with, for Latino parents, this is a concept that they do not understand. And so framing it in a way where teaching them that cutting is just simply an unsafe coping mechanism, and the reason why children tend to cut is because such-and-such-providing a lot of that education has to be presented in a culturally sensitive manner because culturally, cutting is just ... they just don't understand it."). Relatedly, therapists also cited Client/Caregiver Literacy concerns as a factor driving adaptations (e.g., "Some of our parents our lower functioning, some of them didn't go to school, they're immigrant populations, they come from Mexico, and it's really difficult for them to follow along the curriculum and the assignments that we give them. So that has been challenging for us, so we are modifying our group."). Therapists also frequently identified the client's Developmental Level as a factor driving adaptations (e.g., "I think it's just different working with a child that young. So we do a lot of art.").

Adaptations were also described within the context of clinical issues that arose in treatment to address client engagement and functioning. Therapists often described making adaptations to *Promote Youth and Caregiver Engagement* (e.g. "I think the kids that were not as engaged, and they were already resisting, so I think I used [jokes] more with them."). Additional clinical issues included the *Youth's Clinical Presentation* (e.g., symptomatology or

severity; e.g., "For me, I've had to adapt more for children who have gone through severe abuse, the young, earlier ones, the young trauma children who shut down. They're frozen, numb. I'm having a lot of challenges with that.") and the client's Family Functioning (e.g., caregiver's mental health, financial stability, custody issues; e.g., "There might be homelessness involved, or there might be, you know, maybe ... obviously a lot of financial issues that you would be seeing, a lot of financial issues. Their parent's own mental health issues."), which arose as chronic challenges that prompted therapists to make adaptations. Similarly, some therapists described adapting EBPs due to Emergent Life Events (i.e., crises of the week; e.g., "I usually don't omit components, but, I mean, we'll take little breaks from the actual practice model. If something comes up, I mean a lot of times, like, people die or they move or something happens.") arising.

Less frequently, therapists described making adaptations due to their own *Personal Preferences* as professionals, regardless of their client's characteristics (e.g., "Well, it's just adding more things to it, it's definitely your style. You've got to work with your own style so that's something that I've been doing differently than other therapists, too, but with some of the interventions and when it comes to, relaxation skills, I try to offer more skills and try to actually not just focus on the skills that we can do personally, but also on other skills that will make you feel relaxed too.").

# Associations between Client Characteristics (Contexts) and Types of Adaptations

To determine how different types of adaptations may relate to different therapist motivations for adaptations, we examined how adaptation type codes co-occurred with context codes related to client characteristics. Themes and illustrative quotes are presented in Table 3. Quotes in the text are annotated according to the context, which is denoted by number, and adaptation type, which is denoted by letter. Here we discuss the most notable themes that reveal the contexts in which augmenting and reducing/reordering adaptations were reportedly made.

First, therapists reported augmenting adaptations more frequently than reducing/reordering adaptations across all client characteristics. To make EBPs more engaging for clients, therapists reported modifying the presentation of practices (1a). For the client's background characteristics (e.g., culture, literacy level and education), therapists most frequently discussed modifying the language, terminology, or presentation of the EBP. Regarding culture, these adaptations involved not only translating materials but also making sure that terms were culturally appropriate (2a). Further, therapists reported that they integrated additional psychoeducation to increase understanding and engagement for clients from diverse cultural backgrounds (2b). For clients with lower literacy or educational levels, therapists also reported simplifying the language (3a) and slowing the pacing of the practice delivery to promote acquisition of skills that were unfamiliar for the clients (3b). Developmental level was associated with adaptations that changed how material was presented as well as with the integration of strategies such as art and play to make content more appropriate for their child clients (4a/4b). The youth's clinical presentation and the functioning of the caregiver and family were contexts associated with lengthening the pacing of treatment delivery to address case complexity, severity of symptoms, or comorbidity (5a/6a), along with adaptations that integrated supplemental content and strategies. For youth's clinical presentation, therapists reported integrating content or strategies from other EBPs (5a), whereas for caregiver and family functioning, they discussed providing additional services or providing the parent with strategies to address their own coping (6b).

Second, whereas all client characteristics were associated with augmenting adaptations, only certain client characteristics were associated with reducing/reordering adaptations. Clinical characteristics, including the youth's clinical presentation and the family and caregiver functioning, were more frequently associated with reducing/reordering adaptations than were background characteristics. The youth's clinical presentation was related to reducing the content of EBPs, with two subthemes emerging. Therapists described omitting EBP content if youth did not present with symptomatology associated with that therapeutic content (5c). At other times, therapists described reducing content or loosening the structure of an EBP to address other concerns related to the severity of a client's symptoms. Similarly, for emergent life events, therapists reported reordering content to address crises (7a) or pausing the delivery of EBP content to address crises (i.e., emergent life events) that were brought up in session (7b). Notably, on no occasions did therapists describe reducing content of EBPs to accommodate a client's cultural background.

### DISCUSSION

Community therapists are likely to adapt EBPs to fit the needs of their local contexts and clients (Lau et al., 2017; Stern, Alaggia, Watson, & Morton, 2008). Although some adaptations may improve therapist and client engagement with an EBP, other types of adaptations could represent a drift from fidelity (Stirman et al., 2015). As fidelity is a critical implementation outcome, which accounts for 20%–60% of variance in clinical outcomes (Drake et al., 2006), further research needs to understand how and why community clinicians adapt EBPs to their local context (Aarons et al., 2012; Cabassa & Baumann, 2013; Chambers & Norton, 2016). The development of an adaptome, which categorizes adaptation types and contexts, will expand our

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TABLE 3           Quotes Illustrating Themes Related to Client Characteristics (Context) and Adaptation Types			
<ol> <li>Engagement         <ol> <li>Modifying Presentation</li> </ol> </li> </ol>	I interweave whatever. I've got a kid who plays football and doesn't want to talk to me, I will use all football language and interweave [Practice A], I show up in their world and then I deliver how I've got to deliver stuff. So I really fine tune it to whatever my clients' needs are.		
2. Culture			
a. Modifying Presentation	Some of the examples that they have there I think, you know, might not necessarily fit like this particular culture so I'll find something that they could relate to a little bit better, a situation they can relate to a little bit better. I think it depends on, I mean, you do have to be culturally sensitive to the families and kind of getting to know what		
<ul> <li>b. Integrating Supplemental Content/Strategies</li> <li>2. Literary</li> </ul>	their beliefs are. Some of the things that they may not necessarily be so open to, but kind of like giving them psychoeducation onto what the importance is of it, I think allows the parents to be a little bit more open to it.		
3. Literacy	[The parents'] level of understanding might not be as straightforward as what [Practice B] can put on the table their		
c. Modifying Presentation	level of education and their understanding and how they're able to connect the dots. So how I usually interpret it is that obviously using that [Practice B] model, I break down what the core concepts is trying to teach, and then translating in such a way that they're able to grasp and understand.		
d. Lengthening/Extending Pacing	Then you have to repeat it because most of our clients' education is like, a lower level or they come from another country. So they don't really know a lot and it's something new that they're going—because they never went to school, so it's a challenge for them. To be—to pay attention during that time and it's just you trying to repeat it and explain to them in a way they understand.		
4. Developmental Level	explain to defin in a way and shallers and.		
e. Modifying Presentation	You know, especially with the little ones, if we're doing the cognitive component, just trying to have them understand that concept at the development level they're at. So the cognitive triangle can be challenging for a six-year-old. But just using more physical activities to get them to understand that. So I've been surprised at how much like even the five- and six-year-olds can understand those components.		
f. Integrating Supplemental Content/Strategies	I do games, I'll do a lot of therapeutic games, or I'll bring other coloring activities, like more feelings but big faces and things like that. I do a lot of storybooks, a lot of books with little feelings. Even with the older ones, they love games, I've gone in I've made Candyland therapeutic, what's red, red is angry, tell me what is happening in your life where you get angry or things like that.		
5. Youth Clinical Presentation			
g. Lengthening/Extending Pacing	When I think of adaptations, I think about the clients who I feel like I have to go over a certain practice element more than once, or maybe spend more time, or sometimes even revisit that practice. For instance, I'm thinking of a particular client where we were doing a lot of coping with anger and relaxation techniques. And once we got past that we did a lot of the other things like social skills, problem solving skills. But it always came back to, okay, how are you going to manage your anger? So I always felt that with that particular client, it was really useful to go back. And, like I said, to revisit some of the early elements that we'd done just so that he was able to maintain a good grasp on what the whole process was about.		
h. Integrating Supplemental Content/Strategies	When I first started [Practice C], I didn't have these other EBPs, but now I will mix, like sometimes when I'm doing [Practice D], I'll put in some [Practice C] training rules or that I will mix in, even with the [Practice E] I'll bring in some [Practice C]. Even though [Practice E] is more psychodynamic, sometimes you need the CBT because you have to cut those behaviors out at the moment that's what's causing the crisis. So I'll mix in some of the EBPs at times.		
i. Reducing	If I see a kid that has a ton of coping skills already. So, I have a kid on my caseload who loved to read, listen to music, he played an instrument and had all these coping skills. So, there wasn't a lot of need for that piece within the psychoeducation link, choosing coping skills and finding, he already had so many.		
6. Family/Caregiver Functioning			
j. Lengthening/Extending Pacing	So we have to kind of go back and help Mom with either finding ways to calm her down, so yeah, you are kind of, "What are things you can do to calm down in the moment when he pee-pees again on himself for the third time? How do you not make a big deal about it, Mom? What can you do? How can you learn to back off a little bit so he can have the self-esteem to go on his own again because he's capable." So it's like—and sometimes you're doing this talk many weeks in a row, so you have to extend it because this enuresis is, it could drag out for parents for years,		
k. Integrating Supplemental Content/Strategies	So I'm training [Practice F], which is for anger management, so I bring that in a lot, too, even if I'm just doing the standard [Practice B], I'll bring in the [Practice F] part of it into it, because to help the parents to manage their own emotions.		
7. Crises of the Week/Emergent Life E			
l. Adjusting the Order	I think so, part of it is not going in the order that it's supposed to go, but just like I said, if a crisis comes up that week, then just fast forwarding to that topic that talks about that, and then still keeping track and making sure that I cover all the weeks, but doing it at the parents' pace, taking from the end and the beginning and everything, or going back and reviewing something that we had already talked about.		
m. Pausing	At times, I've had to adjust the pacing because of maybe a crisis that had arisen with that particular client, so we would stop and kind of address the crisis, and then, if there was time, I'd get us back on.		

Note: Numbers denote contexts for adaptations and letters denote types of adaptations. EBP = evidence-based practice.

ability to understand how the adaptation process impacts implementation and clinical outcomes (Chambers & Norton, 2016). However, to date, the majority research on adaptations has occurred within effectiveness trials and the few implementation studies have focused on how therapist characteristics predict different types of adaptations (Lau et al., 2017; Stirman et al., 2015). The current study took place within the context of the sustainment period of a system-driven reform of children's mental health services in Los Angeles County involving implementation of multiple EBPs. This context provided the unique opportunity to investigate community therapist adaptations to multiple EBPs after they had been implemented within a system of care for more than 5 years. In the current study, qualitative interviews were conducted with therapists and analyzed to better understand the types of adaptations therapists made for their diverse clients and when they made these adaptations.

This study built upon quantitative findings on the Augmenting and Reducing/Reordering Framework (Lau et al., 2017) to provide illustrative examples of the types of adaptations therapists made and understand the contexts for making these adaptations. Consistent with Lau et al. (2017) quantitative survey findings, therapists most frequently described making adaptations to augment EBPs, including modifying the language and presentation of EBPs, integrating supplemental content, and lengthening the course of treatment or slowing the pacing of treatment delivery. Therapists less frequently described adaptations that reduced or reordered elements of EBPs, though these did arise occasionally when therapists reported omitting core components of treatments (e.g., exposure for anxiety) or loosening the structure of EBP delivery, which could indicate drift. Exposure for anxiety and trauma narratives have been identified as treatment components that community therapists frequently omit, due to their concerns that these components could be harmful to clients, challenges with delivery, and preferences for less aversive strategies such as relaxation (Allen & Johnson, 2012; Becker-Haimes, Okamura, et al., 2017; Hanson et al., 2014). It has been recognized that specialized implementation strategies might be needed to support fidelity to these less preferred EBP components, which are also identified as essential to treatment effectiveness (Becker-Haimes, Franklin, Bodie, & Beidas, 2017).

This study also expanded upon the Augmenting and Reducing/Reordering Framework by identifying additional adaptation types that emerged regarding the setting where EBPs were delivered and the participants involved in treatment, which might vary from how the practices were originally designed and tested. Given that therapists delivering children's mental health services are likely to interact with the various systems in a child's life, including families, schools, and child welfare, it is important to consider how settings and various caregivers impact EBP delivery. For example, because many EBPs require caregiver involvement, it is important to recognize how interventions may need to be adapted to increase access and engagement of youth involved in the child welfare system (Dorsey et al., 2014; Mersky, Topitzes, Grant-Savela, Brondino, & McNeil, 2016). Alternately, more structurally appropriate EBP models may need to be adopted to address large specialized populations in children's mental health based on relevance mapping strategies (Chorpita, Bernstein, & Daleiden, 2011).

Overall, the themes that emerged as contexts for adaptations were consistent with literature that has adapted treatments to address culture (e.g. Domenech Rodríguez et al., 2011), developmental considerations (e.g., Bagner et al., 2013), and clinical symptomatology (e.g., Pincus, Eyberg, & Choate, 2005). However, therapists generally described their adaptations as individualizing the treatment for a client, which has been described as "cultural tailoring," as opposed to making broad changes for a population, which has been described as "cultural targeting" in the cultural adaptation literature (Kreuter, Lukwago, Bucholtz, Clark, & Sanders-Thompson, 2003). Of interest, the types of adaptations that therapists reported making varied across different client characteristics. Therapists discussed modifying the presentation of treatment materials for a variety of reasons, including the need to promote engagement, address the client's culture or literacy levels, or make EBPs developmentally appropriate. These adaptations could be considered to be part of the "adaptable periphery" or elements of EBPs that can be adapted to increase the fit of the intervention without undermining the its integrity (Damschroder et al., 2009). Themes that emerged in these interviews support past qualitative findings that community therapists frequently tailor the terminology or language used to meet the needs of their clients and improve client engagement (Gibbs, Krieger, Cutbush, Clinton-Sherrod, & Miller, 2016; Stirman et al., 2013).

Although augmenting adaptations were described across all client characteristics, reducing/reordering adaptations occurred more frequently within the contexts of clinical issues that arose in treatment, including the severity of the client's symptoms, the family's functioning, and the occurrence of emergent life events as compared to background characteristics. Encouragingly, therapists did not report omitting treatment components in relation to their client's culture. There have been concerns that therapists omit core components of EBPs because they did not find them to be culturally acceptable (Lau, 2012; Morawska et al., 2012). Omitting core components of EBPs could exacerbate mental health disparities, leading to warnings against "improvised drifts away from evidence-based fidelity in the name of cultural competence" (Lau, 2006, p. 297). Identifying and addressing perceptions about EBPs may help address inappropriate reductions in content, as early survey research found that the sole therapist attribute that predicted reports of reducing/reordering adaptations was more negative perceptions of EBPs (Lau et al., 2017).

On the other hand, reducing and reordering treatment components could be consistent with treatment integrity for certain clinical presentations. Flexible, modular, components-based treatments that allow for adaptations guided by theory, ongoing progress monitoring, and decision-making tools have been designed to address comorbidity or treatment interferences, such as challenges with engagement (Chorpita & Daleiden, 2009; Southam-Gerow et al., 2014). The Modular Approach to Treatment for Children with Anxiety, Depression, Trauma, or Conduct Problems (MATCH) has demonstrated improved clinical outcomes in comparison to usual care and standard evidence-based treatments delivered in community mental health settings (Chorpita et al., 2017; Chorpita et al., 2013; Weisz et al., 2012). Therapists delivering MATCH were found to frequently skip or reorder treatment components, potentially in response to issues that arose in treatment, though they still delivered evidence-based content in session (Park, Chorpita, Regan, & Weisz, 2015). In combination, these findings could suggest reducing/reordering adaptations can be consistent with high-quality care if applied appropriately.

Further research is needed to better understand when reducing/reordering adaptations are necessary. For example, themes related to reordering or pausing EBP content delivery for "crises of the week" were consistent with observational research, which has shown that therapists are less likely to deliver EBP content in sessions when emergent life events occur (Guan, Levy, et al., 2017). Even though therapists in our study frequently discussed linking the crisis with the EBP content, the observational study found that this rarely occurs. Furthermore, emergent life events have been shown to disrupt treatment for multiple sessions and decrease intervention effectiveness (Guan, Park, & Chorpita, 2017). Therefore, further training and supervision may be needed to help therapists navigate emergent life events and incorporate them into delivering EBPs without compromising fidelity to core components of treatment.

#### Limitations

There are important limitations to note regarding this study. First, therapist reports of adaptations are susceptible to self-report biases related to recall, social desirability, and recognition of when adaptations are occurring (Stirman et al., 2015). To reduce concerns about social desirability, interviewers focused on normalizing adaptations and emphasizing the importance of learning from therapists about how they "made practices work" for the diverse children and families they served. In future research, therapist reports of adaptations should be validated against observations of session data. Second, although this study began to illuminate client characteristics associated with types of adaptations, the therapists did not consistently provide rationales for every adaptation they made. Therefore, further research should be conducted to identify how client characteristics predict adaptation types. Further, the composition of the study sample

could limit generalizability of the findings. The proportion of unlicensed therapists in our sample (i.e., 80%) was greater than that found in a larger sample in the same service system (i.e., 56.7%; Lau et al., 2017) and a nationally representative sample of therapists working in community mental health settings, which was closer to 40% (Schoenwald et al., 2008). Therefore it is possible that the adaptations described may be reflective of the implementation experiences of relatively novice therapists, who were faced with the complexities of delivering multiple EBPs to high need children and families. Additional research should identify whether more seasoned clinicians make similar adaptations, employ additional strategies to tailor EBPs to their clients, or focus more on delivering interventions with fidelity. Finally, it is possible to hypothesize about how adaptations could increase client engagement through augmenting approaches, or potentially diminish clinical outcomes when core components are reduced; however, further research is needed that investigates how client-level outcomes are impacted by different types of adaptations.

Even with these limitations, this study makes important contributions to our current understanding of how community therapist adaptations to EBPs within implementation-as-usual. By providing illustrative examples of therapist adaptations and identifying how client characteristics are related to different types of adaptations, this study contributes to developing an adaptome to the process of adaptations within community implementation of EBPs. Future research can expand upon these qualitative findings with the goal of evaluating if the different types of adaptations that therapists make increase the fit of interventions or compromise fidelity and clinical outcomes. This study also helps to illuminate important questions about how community therapists, often from diverse backgrounds themselves, adapt EBPs when they are implemented in communities that serve ethnic minority groups, which helps to link implementation science with cultural adaptation research (Cabassa & Baumann, 2013). As one of the first studies to examine community therapist reports of both how and when they adapt multiple EBPs during implementation-as-usual, this study can help inform future implementation efforts. For example, trainers may want to focus on what types of adaptations are appropriate for EBPs and the client characteristics that could warrant these adaptations. By collaborating with community therapists to plan for adaptations that focus on increasing fit for their clients, EBP implementation could be improved for diverse children and families seeking care within publicly funded mental health settings (Aarons et al., 2012).

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#### REFERENCES

- Aarons, G., Green, A., Palinkas, L., Self-Brown, S., Whitaker, D., Lutzker, J., ... Chaffin, M. (2012). Dynamic adaptation process to implement an evidence-based child maltreatment intervention. *Implementation Science*, 7(32), 1–9. doi:10.1186/1748-5908-7-32
- Aarons, G. A., & Palinkas, L. A. (2007). Implementation of evidence-based practice in child welfare: Service provider perspectives. *Administration* and Policy in Mental Health and Mental Health Services Research, 34 (4), 411–419. doi:10.1007/s10488-007-0121-3
- Allen, B., & Johnson, J. C. (2012). Utilization and implementation of Trauma-Focused Cognitive–Behavioral therapy for the treatment of maltreated children. *Child Maltreatment*, 17(1), 80–85. doi:10.1177/ 1077559511418220
- Bagner, D. M., Coxe, S., Hungerford, G. M., Garcia, D., Barroso, N. E., Hernandez, J., & Rosa-Olivares, J. (2016). Behavioral parent training in infancy: A window of opportunity for high-risk families. *Journal of Abnormal Child Psychology*, 44(5), 901–912. doi:10.1007/s10802-015-0089-5
- Bagner, D. M., Rodríguez, G. M., Blake, C. A., & Rosa-Olivares, J. (2013). Home-based preventive parenting intervention for at-risk infants and their families: An open trial. *Cognitive and Behavioral Practice*, 20(3), 334–348. doi:10.1016/j.cbpra.2012.08.001
- Barlow, D. H., Farchione, T. J., Sauer-Zavala, S., Latin, H. M., Ellard, K. K., Bullis, J. R., ... Cassiello-Robbins, C. (2017). Unified protocol for transdiagnostic treatment of emotional disorders: Therapist guide. New York, NY: Oxford University Press.
- Baumann, A., Cabassa, L., & Stirman, S. (2017). Adaptation in dissemination and implementation science. In R. C. Brownson, G. A. Colditz, & E. K. Proctor (Eds.), *Dissemination and implementation research in health: Translating science to practice* (2nd ed., pp. 285–300). New York, NY: Oxford University Press.
- Baumann, A. A., Powell, B. J., Kohl, P. L., Tabak, R. G., Penalba, V., Proctor, E. K., ... Cabassa, L. J. (2015). Cultural adaptation and implementation of evidence-based parent-training: A systematic review and critique of guiding evidence. *Children and Youth Services Review*, 53, 113–120. doi:10.1016/j.childyouth.2015.03.025
- Becker-Haimes, E. M., Franklin, M., Bodie, J., & Beidas, R. S. (2017). Feasibility and acceptability of a toolkit to facilitate clinician use of exposure therapy for youth. *Evidence-Based Practice in Child and Adolescent Mental Health*, 2, 165–178. Advance online publication. doi:10.1080/23794925.2017.1383867
- Becker-Haimes, E. M., Okamura, K. H., Wolk, C. B., Rubin, R., Evans, A. C., & Beidas, R. S. (2017). Predictors of clinician use of exposure therapy in community mental health settings. *Journal of Anxiety Disorders*, 49, 88–94. doi:10.1016/j.janxdis.2017.04.002
- Bernal, G., Jiménez-Chafey, M. I., & Domenech Rodríguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology: Research and Practice*, 40(4), 361–368. doi:10.1037/a0016401
- BigFoot, D., & Schmidt, S. (2010). Honoring children, mending the circle: Cultural adaptation of trauma-focused cognitive-behavioral therapy for American Indian and Alaska Native children. *Journal of Clinical Psychology*, 66(8), 847–856. doi:10.1002/jclp.20707
- Borntrager, C. F., Chorpita, B. F., Higa-McMillan, C., & Weisz, J. R. (2015). Provider attitudes toward evidence-based practices: Are the concerns with the evidence or with the manuals? *Psychiatric Services*, 60(5), 677–681. doi:10.1176/ps.2009.60.5.677
- Brookman-Frazee, L., Stadnick, N., Roesch, S., Regan, J., Barnett, M., Bando, L., ... 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. doi:10.1007/s10488-016-0731-8

- Brookman-Frazee, L. I., Drahota, A., & Stadnick, N. (2012). Training community mental health therapists to deliver a package of evidencebased practice strategies for school-age children with autism spectrum disorders: A pilot study. *Journal of Autism and Developmental Disorders*, 42(8), 1651–1661. doi:10.1007/s10803-011-1406-7
- Cabassa, L. J., & Baumann, A. A. (2013). A two-way street: Bridging implementation science and cultural adaptations of mental health treatments. *Implementation Science*, 8, 1–14. doi:10.1186/1748-5908-8-90
- Chambers, D. A., & Norton, W. E. (2016). The adaptome: Advancing the science of intervention adaptation. *American Journal of Preventive Medicine*, 51(4), S124–S131. doi:10.1016/j.amepre.2016.05.011
- Chorpita, B., Daleiden, E., Park, A., Ward, A., Levy, M., Cromley, T., ... Krull, J. (2017). Child STEPs in California: A cluster randomized effectiveness trial comparing modular treatment with community implemented treatment for youth with anxiety, depression, conduct problems, or traumatic stress. *Journal of Consulting and Clinical Psychology*, 85(1), 13–25. doi:10.1037/ccp0000133
- Chorpita, B., Weisz, J., Daleiden, E., Schoenwald, S., Palinkas, L., Miranda, J., ... Gibbons, R. (2013). Long-term outcomes for the Child STEPs randomized effectiveness trial: A comparison of modular and standard treatment designs with usual care. *Journal of Consulting and Clinical Psychology*, 81(6), 999–1009. doi:10.1037/a0034200
- Chorpita, B. F., Bernstein, A., & Daleiden, E. L. (2011). Empirically guided coordination of multiple evidence-based treatments: An illustration of relevance mapping in children's mental health services. *Journal of Consulting and Clinical Psychology*, *79*(4), 470–480. doi:10.1037/a0023982
- Chorpita, B. F., & Daleiden, E. L. (2009). Mapping evidence-based treatments for children and adolescents: Application of the distillation and matching model to 615 treatments from 322 randomized trials. *Journal of Consulting* and Clinical Psychology, 77, 566–579. doi:10.1037/a0014565
- Chu, J., & Leino, A. (2017). Advancement in the maturing science of cultural adaptations of evidence-based interventions. *Journal of Consulting and Clinical Psychology*, 85, 45–57. doi:10.1037/ccp0000145.supp
- Cohen, J. A., Mannarino, A. P., & Staron, V. R. (2006). A pilot study of modified cognitive-behavioral therapy for childhood traumatic grief (CBT-CTG). *Journal of the American Academy of Child & Adolescent Psychiatry*, 45 (12), 1465–1473. doi:10.1097/01.chi.0000237705.43260.2c
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50. doi:10.1186/ 1748-5908-4-50
- Domenech Rodríguez, M. M., Baumann, A. A., & Schwartz, A. L. (2011). Cultural adaptation of an evidence based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology*, 47(1–2), 170–186. doi:10.1007/s10464-010-9371-4
- Dorsey, S., Pullmann, M. D., Berliner, L., Koschmann, E., McKay, M., & Deblinger, E. (2014). Engaging foster parents in treatment: A randomized trial of supplementing Trauma-focused Cognitive Behavioral Therapy with evidence-based engagement strategies. *Child Abuse & Neglect*, 38(9), 1508–1520. doi:10.1016/j.chiabu.2014.03.020
- Drake, R. E., Bond, G. R., & Rapp, C. (2006). Explaining the variance within supported employment programs: Comment on "what predicts supported employment outcomes?". *Community Mental Health Journal*, 42(3), 315–318. doi:10.1007/s10597-006-9038-7
- Gibbs, D. A., Krieger, K. E., Cutbush, S. L., Clinton-Sherrod, A. M., & Miller, S. (2016). Implementer-initiated adaptation of evidence-based interventions: Kids remember the blue wig. *Health Education Research*, 31(3), 405–415. doi:10.1093/her/cyw017
- Guan, K., Levy, M. C., Kim, R. E., Brown, T. E., Reding, M. E., Rith-Najarian, L., ... Chorpita, B. F. (2017). Managing In-Session "Surprises:" Provider Responses to Emergent Life Events during Evidence-Based Treatment Implementation. *Administration and Policy in Mental Health and Mental Health Services Research*, 44(2), 164–176. doi:10.1007/s10488-015-0692-3

- Guan, K., Park, A. L., & Chorpita, B. F. (2017). Emergent life events during youth evidence-based treatment: Impact on future provider adherence and clinical progress. *Journal of Clinical Child & Adolescent Psychology*, 1–13. doi:10.1080/15374416.2017.1295382
- Hamilton, A. B., Chinman, M., Cohen, A. N., Oberman, R. S., & Young, A. S. (2015). Implementation of consumer providers into mental health intensive case management teams. *The Journal of Behavioral Health Services & Research*, 42(1), 100–108. doi:10.1007/s11414-013-9365-8
- Hanson, R. F., Gros, K. S., Davidson, T. M., Barr, S., Cohen, J., Deblinger, E., ... Ruggiero, K. J. (2014). National trainers' perspectives on challenges to implementation of an empirically-supported mental health treatment. *Administration and Policy in Mental Health and Mental Health Services Research*, 41(4), 522–534. doi:10.1007/s10488-013-0492-6
- Hoagwood, K., Olin, S., Horwitz, S., McKay, M., Cleek, A., Gleacher, A., ... Hogan, M. (2014). Scaling up evidence-based practices for children and families in New York state: Toward evidence-based policies on implementation for state mental health systems. *Journal of Clinical Child & Adolescent Psychology*, 43(2), 145–157. doi:10.1080/ 15374416.2013.869749
- Kreuter, M. W., Lukwago, S. N., Bucholtz, D. C., Clark, E. M., & Sanders-Thompson, V. (2003). Achieving cultural appropriateness in health promotion programs: Targeted and tailored approaches. *Health Education & Behavior*, 30(2), 133–146. doi:10.1177/1090198102251021
- Kumpfer, K., Magalhães, C., & Xie, J. (2017). Cultural adaptation and implementation of family evidence-based interventions with diverse populations. *Prevention Science*, 18(6), 649–659. doi:10.1007/s11121-016-0719-3
- Lau, A., Barnett, M., Stadnick, N., Saifan, D., Regan, J., Wiltsey Stirman, S., ... Brookman-Frazee, L. (2017). Therapist report of adaptations to delivery of evidence-based practices within a system-driven reform of publicly funded children's mental health services. *Journal of Consulting and Clinical Psychology*, 85(7), 664–675. doi:10.1037/ccp0000215
- Lau, A. S. (2006). Making the case for selective and directed cultural adaptations of evidence-based treatments: Examples from parent training. *Clinical Psychology: Science and Practice*, 13, 295–310. doi:10.1111/ j.1468-2850.2006.00042.x
- Lau, A. S., & 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, 31–39. doi:10.1186/s13012-016-0388-4
- Lau, A. S. (2012). Reflections on adapting parent training for Chinese immigrants: blind alleys, thoroughfares, and test drives. In G. Bernal & M. M. Domenech Rodríguez (Eds.), Cultural adaptations: Tools for evidence-based practice with diverse populations (pp. 133–156). Washington, DC, US: American Psychological Association.
- McHugh, R., & Barlow, D. (2010). The dissemination and implementation of evidence-based psychological treatments: A review of current efforts. *American Psychologist*, 65(2), 73–84. doi:10.1037/a0018121
- Mersky, J. P., Topitzes, J., Grant-Savela, S. D., Brondino, M. J., & McNeil, C. B. (2016). Adapting Parent–Child Interaction Therapy to foster care: Outcomes from a randomized trial. *Research on Social Work Practice*, 26 (2), 157–167. doi:10.1177/1049731514543023
- Morawska, A., Sanders, M. R., O'Brien, J., McAuliffe, C., Pope, S., & Anderson, E. (2012). Practitioner perceptions of the use of the Triple P– Positive Parenting Program with families from culturally diverse backgrounds. *Australian Journal of Primary Health*, 18(4), 313–320.
- Najavits, L. (2002). Seeking safety: A treatment manual for PTSD and substance abuse. New York, NY: Guilford Publications.
- Palinkas, L. A. (2014). Qualitative and mixed methods in mental health services and implementation research. *Journal of Clinical Child & Adolescent Psychology*, 43(6), 851–861. doi:10.1080/15374416.2014.910791
- Park, A. L., Chorpita, B. F., Regan, J., & Weisz, J. R.; Research Network on Youth Mental Health. (2015). Integrity of evidence-based practice:

Are providers modifying practice content or practice sequencing? Administration and Policy in Mental Health and Mental Health Services Research, 42(2), 186–196. doi:10.1007/s10488-014-0559-z

Pincus, D., Eyberg, S., & Choate, M. (2005). Adapting Parent-Child Interaction Therapy for young children with separation anxiety disorder. *Education and Treatment of Children*, 28, 163–181. West Virginia University Press.

Rogers, E. M. (1962). *Diffusion of innovations*. New York, NY: Free Press. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY:

- Free Press.
  Schoenwald, S. K., Chapman, J. E., Kelleher, K., Hoagwood, K. E., Landsverk, J., & Stevens, J.; Research Network on Youth Mental Health. (2008). A survey of the infrastructure for children's mental health services: Implications for the implementation of empirically supported treatments (ESTs). Administration and Policy in Mental Health and Mental Health Services Research, 35(1–2), 84–97. doi:10.1007/s10488-
- 007-0147-6 Southam-Gerow, M., Daleiden, E., Chorpita, B., Bae, C., Mitchell, C., Faye, M., & Alba, M. (2014). MAPping Los Angeles County: Taking an Evidence-Informed model of mental health care to scale. *Journal of Clinical Child & Adolescent Psychology*, 43(2), 190–200. doi:10.1080/ 15374416.2013.833098
- Southam-Gerow, M. A., Marder, A. M., & Austin, A. A. (2008). Dissemination of evidence-based manualized treatments for children and families in practice settings. In R. G. Steele, T. D. Elkin, & M. C. Roberts (Eds.), Handbook of evidence-based therapies for children and adolescents. Issues in clinical child psychology. Boston, MA: Springer
- Spradley, J. (1979). *The ethnographic interview*. New York, NY: Holt, Rinehart and Winston.
- St. George, S. M., Parra-Cardona, R., Vidot, D. C., Molleda, L., Quevedo Terán, A., Castillo Onetto, D., ... Prado, G. (2017). Cultural adaptation of preventive interventions in Hispanic youth. In S. Schwartz & J. Unger (Eds.), Oxford handbook of acculturation and health. New York, NY: Oxford University Press.
- Stern, S. B., Alaggia, R., Watson, K., & Morton, T. R. (2008). Implementing an evidence-based parenting program with adherence in the real world of community practice. *Research on Social Work Practice*, 18(6), 543–554. doi:10.1177/1049731507308999
- Stirman, S. W., Gamarra, J. M., Bartlett, B. A., Calloway, A., & Gutner, C. A. (2017). Empirical examinations of modifications and adaptations to evidence-based psychotherapies: Methodologies, impact, and future directions. *Clinical Psychology: Science and Practice*, 24(4), 396– 420.
- Stirman, S. W., Gutner, C. A., Crits-Christoph, P., Edmunds, J., Evans, A. C., & Beidas, R. S. (2015). Relationships between clinician-level attributes and fidelity-consistent and fidelity-inconsistent modifications to an evidence-based psychotherapy. *Implementation Science*, 10, 115. doi:10.1186/s13012-015-0308-z
- Stirman, S. W., Miller, C. J., Toder, K., & Calloway, A. (2013). Development of a framework and coding system for modifications and adaptations of evidence-based interventions. *Implementation Science*, 8 (1), 65. doi:10.1186/1748-5908-8-65
- Weisz, J. R., Chorpita, B. F., Palinkas, L. A., Schoenwald, S. K., Miranda, J., Bearman, S. K., ... Gray, J. (2012). Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: A randomized effectiveness trial. *Archives of General Psychiatry*, 69(3), 274– 282. doi:10.1001/archgenpsychiatry.2011.147
- Willms, D. G., Best, J. A., Taylor, D. W., Gilbert, J. R., Wilson, D., Lindsay, E. A., & Singer, J. (1990). A systematic approach for using qualitative methods in primary prevention research. *Medical Anthropology Quarterly*, 4(4), 391–409. doi:10.1525/maq.1990.4. issue-4