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ORIGINAL ARTICLE

Integrity of Evidence-Based Practice: Are Providers Modifying Practice Content or Practice Sequencing?

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Abstract This study examined patterns of evidence-based treatment (EBT) implementation within community settings by evaluating integrity along separate dimensions of practice content (PC; a session included the prescribed procedure) and practice sequencing (a session occurred in the prescribed sequence) within a recent randomized effectiveness trial. We measured whether sessions showed integrity to PC and to flexible or linear practice sequences. Findings revealed that providers tended to incorporate content from the EBT protocol in most treatment sessions, but that the sequencing of the sessions was often modified, suggesting that providers are amenable to evidence-based procedures, but not necessarily their prescribed arrangement.

Keywords Integrity · Evidence-based practice · Monitoring · Implementation

Introduction

Efforts to successfully bridge the gap between the scientific and applied domains of clinical psychology have placed an increasing focus on the dissemination and implementation of evidence-based treatments (EBTs) into community mental health settings (Calhoun et al. 1998; Chambless and Hollon 1998; Lonigan et al. 1998; National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Invention and Deployment 2001; Office of the Surgeon General 1999, 2004; President's New Freedom Commission on Mental Health 2003; Schoenwald et al. 2008). Despite substantial efforts, however, most findings indicate that providers rarely incorporate these efficacious treatments into their own everyday practice (Weersing et al. 2002)—citing concerns raised that most EBTs have not been developed for or tested with the complex, comorbid youths who are so often seen in public mental health systems (Southam-Gerow et al. 2008). Further, although several studies suggest that EBTs outperform usual care (e.g., Chorpita and Southam-Gerow 2006; Weisz et al. 1995, 2006; Weisz and Kazdin 2010), others have found that success in efficacy trials does not guarantee success in applied service contexts (Southam-Gerow et al. 2010; Weisz and Gray 2008). To address these issues, dissemination and implementation research has sought to identify specific barriers and to investigate possible avenues for more successful use of EBTs in service systems.

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Integrity in Research Contexts

One strategy of considerable interest that may facilitate the successful implementation of EBTs into community mental health systems involves the construct of treatment integrity. Within traditional research contexts, treatment integrity has typically referred to the delivery of interventions as intended (e.g., Forgatch et al. 2005; Perepletchikova and Kazdin 2005; Perepletchikova et al. 2009), and has received consistent attention within randomized clinical trials because of its ability to reduce the uncertainty that client outcomes are a function of the intervention (Proctor 2004). Specifically, assessments of the content and quality of treatment implementation can provide useful information as to whether an intervention's inability to produce a desired outcome is due to its applicability (e.g., the treatment was implemented as intended, but did not produce successful client outcomes, and thus may not have been appropriate for the targeted population) or implementation (e.g., the protocol was not implemented as intended and thus the relationship between the intervention and the outcomes cannot be reliably established; Forgatch et al. 2005; McLeod et al. 2013).

Integrity in Service Contexts

Integrity measurement in service contexts serves a similarly beneficial purpose (Regan et al. 2013; Southam-Gerow and McLeod 2013). Although differing from integrity measurement in research contexts in that it is not being graded for independent variable standardization purposes, integrity measurement in service contexts can help manage the quality of community mental health services by informing opportunities for quality improvement (e.g., discerning which practices or therapeutic techniques providers are particularly strong or weak in implementing) and even protocol re-design (e.g., identifying where challenges to implementation might arise and the nature of such challenges). At present, however, the resources available for assessing and monitoring integrity within service contexts are limited, and with a few exceptions, involve field application of instruments designed primarily for research trial purposes (Schoenwald et al. 2011). Furthermore, given the building literature suggesting that treatment integrity may be more difficult to maintain within service settings as opposed to within laboratory settings (Palinkas et al. 2009, 2013; Travis and Brestan-Knight 2013), it is important to better understand the unique complexities associated with integrity measurement in service contexts. Although integrity measurement has only been a relatively recent consideration within service systems, preliminary research has found that challenges to integrity in service contexts appear to occur in systematic and predictable ways that vary along potentially clinically-relevant dimensions (e.g., Hoagwood et al. 2007; Kendall and Beidas 2007; Kendall et al. 2008; Palinkas et al. 2009). For example, Palinkas et al. (2013) recently performed a qualitative review of community-based providers' use of evidence-based practices after they had participated in a randomized effectiveness trial (Weisz et al. 2012). Findings from this study showed that the majority of providers reported continuing to use procedures from the EBTs they had learned in the study with their subsequent (non-study) cases, but that the providers typically made some form of modification during treatment delivery. Adaptations included using only a portion of the entire treatment protocol, changing the sequencing of procedures, and using procedures with clients who did not meet the criteria for the clinical trial (e.g., clients who were outside of the clinical trial cut-off age range).

Given such observations, it seems possible that integrity measurement should not only consider the different factors typically associated with treatment integrity (e.g., treatment adherence, treatment differentiation, provider competence, and relational factors, such as therapeutic alliance or client improvement; Schoenwald et al. 2011), but also account for specific structural dimensions related to each intervention's design (e.g., Regan et al. 2013). For example, if a provider rearranges the order of practices within the protocol, but adheres to the procedural content within each individual session (e.g., skips session one—an engagement procedure—and moves directly to session two—psychoeducation), is the provider considered to be implementing the treatment with integrity? By any set of integrity measurement metrics that evaluates adherence to practice content (PC), the answer would likely be "yes," but by another set of metrics that considers adherence to the sequencing of practices, the answer may be "no." Such questions become particularly valuable in service settings, in which providers are likely to adapt or "re-invent" the therapy procedures as they attempt to make them fit their particular context (Stirman et al. 2013b). A systematic understanding of the manner in which these adaptations occur might help highlight points of strain in implementation, pointing to strategies for both provider support (e.g., targeted coaching, focused specifically on session content or session sequencing issues) and new treatment design (e.g., engineering protocols to meet anticipated contextual demands, either through changing features of content or sequencing).

Adaptive Treatment Designs

These considerations also become increasingly relevant for EBTs that involve the opportunity for adaptation during an episode of care. For example, emerging research suggests that changes made during a treatment episode based on mid-course feedback significantly enhance ultimate clinical

outcomes (e.g., Bickman 2008; Bickman et al. 2011; Lambert et al. 2001, 2005). Such findings have implications for the dissemination and implementation of EBTs, given that many youth and families in community care settings appear to have a higher degree of stress and challenges than those in typical research trials (Southam-Gerow et al. 2008), and that such challenges can create the need for adaptations and accommodations as care is delivered. With these challenges in mind, Chorpita et al. (2005) outlined principles of Modular treatment design that separate procedural modules (i.e., those that organize clinical activities that occur between a provider and family) from coordination modules (i.e., those that outline possible and/or preferred sequences of the procedural modules). In a recent randomized effectiveness trial examining a Modular protocol (Chorpita and Weisz 2005) that allowed for the sequencing of the procedures to be guided by a flexible algorithm and feedback on outcomes, Weisz et al. (2012) found that the Modular protocol outperformed both Standard EBTs, which utilized fixed and linear sequences of practices, and usual care within community clinic- and school-based mental health settings.

Content and Sequencing

Integrity to PC

Given the potential of these adaptable interventions, researchers have started to consider how the integrity of such treatment approaches can best be measured (e.g., McLeod et al. 2013; Schoenwald et al. 2011). For instance, Regan et al. (2013) recently articulated the utility of measuring treatment integrity at different levels of detail. That is, a more complete understanding of the intervention's implementation can be gained by not only considering the extent to which the content of a discrete planned event, such as a treatment session, adhered to the clinical procedures featured in the protocol (e.g., whether a provider's implementation of exposure for anxiety accurately reflected the procedure outlined in the treatment manual), but also the extent to which multiple events (e.g., an entire course of therapy) included the practices prescribed by the protocol (e.g., whether exposure for anxiety was covered during the delivery of a cognitive behavioral therapy for anxiety protocol). For the purpose of this paper, we refer to integrity that involves consideration of the presence or absence of prescribed practices as *integrity to PC*.

Integrity to Practice Sequencing

Although the adherence component of integrity measurement has historically focused on whether or not the clinical procedures within a given session were implemented as intended by the protocol, it can be argued that the sequencing, order, and logical flow of practices throughout the course of treatment (e.g., a requirement that exposure not be implemented until a fear hierarchy is created), what we refer to as *integrity to practice sequencing* (PS), is equally important and worthy of independent attention (Regan et al. 2013). Integrity to PS can involve considerations of contiguous order (procedure B must immediately follow A), conditionality (B can only occur if A has occurred), repetition logic (A can be repeated, but only immediately and only once), omission (B can be skipped if desired), location (C must occur only in the third session), etc.—features that are often implicitly or explicitly outlined in traditional treatment protocols.

Potential for Improving Treatment Design and Implementation

Because both content and sequencing evaluate separate aspects of treatment operations, assessing them separately could lend important insight into where efforts are most needed in terms of treatment design as well as quality of implementation. For example, if a provider intends to implement a specific treatment, but frequently uses content completely outside of the manual, this would lead to design questions about whether the treatment had adequate content to address the problem at hand (e.g., the intervention lacked procedures for comorbid problems that required attention) or implementation questions about the provider's perceived need to provide alternative content (e.g., the provider was not comfortable implementing exposure for anxiety even though it was prescribed by the manual and thus chose to cover another therapeutic practice). Either way, an explicit focus on content may point to specific opportunities and questions that could lead to potential improvements.

Similarly, a provider might exclusively use content from within the treatment protocol, but adapt the sequencing of the procedures (e.g., skipping a procedure that targets an aspect of the problem that the client does not exhibit). This example raises parallel design questions about the possible need for a flexible logic based on client features or local context and implementation questions about the perceived need to skip content, repeat content, or jump ahead in a protocol. Integrity systems that do not separate these content and sequencing dimensions (e.g., requiring session two of a therapy episode to correspond to session two of the manual) may be insensitive to these distinctions.

The Present Study

The present study examined integrity along separate content and sequencing dimensions with treatment sessions delivered in two different EBT arms of a community-based randomized effectiveness trial (Weisz et al. 2012). The study aims were to: (1) explore patterns of EBT implementation, specifically regarding the sequencing of practices, within community mental health settings, and (2) investigate the frequency and nature of modifications made to the sequencing of practices during implementation. The first aim was met by scoring sessions according to three sets of sequencing or coordination rules that ranged in flexibility. Given the exploratory nature of this study, session integrity was scored dichotomously to simply reflect whether or not the session followed the coordination rules. The first set of coordination rules scored sessions based on the presence of prescribed treatment practices (i.e., integrity to PC) in order to assess whether providers were delivering content inside or outside of the protocol. A high proportion of sessions achieving integrity under this set of coordination rules may suggest that the protocol's content was adequate for addressing the client's needs in that the provider did not perceive the need to incorporate therapeutic practices from outside of the protocol. The second set of coordination rules scored sessions based on the decision-making algorithms featured in the *Modular Approach to Therapy for Children with Anxiety, Depression, or Conduct Problems* (*MATCH*; Chorpita and Weisz 2005) protocol to evaluate whether providers' implementation followed the structured, but flexible, sequence of practices prescribed by the protocol. A high proportion of sessions achieving integrity under this set of coordination rules would suggest that providers' current implementation of interventions may be similar to the implementation prescribed by these more adaptable treatment protocols and that such treatment designs may be well suited for community mental health settings. The third set of coordination rules were linear in nature and were used to score sessions to examine whether providers adhered to the linear sequencing procedures often featured in traditional EBT manuals. A high proportion of sessions achieving integrity under this set of coordination rules would suggest that providers may not actually require, or at least actively utilize, more flexible interventions and that the perception of increased flexibility (e.g., the opportunity to make modifications to the intervention) may be more important than the actual flexibility of the protocol. The second study aim was met by identifying the sessions that did not meet criteria for integrity to PS from the first study aim, and cataloging the types of modifications (e.g., skipping or revisiting practices, covering material from outside of the protocols) that characterized those sessions.

Method

Participants

Provider Participant Sample

The present study included providers ($n = 56$) recruited from 10 clinic- and school-based outpatient mental health agencies in Boston, Massachusetts and Honolulu, Hawaii as part of the Child Systems and Treatment Enhancement Projects' randomized effectiveness trial (Weisz et al. 2012). Of these providers, 83.9 % were women and 64.3 % were Caucasian. Providers ranged in age from 25 to 60 years (*Mean* = 41.87; SD = 10.51), and had an average of 6.46 years (SD = 6.34) of clinical training. As evidenced in Table 1, providers had varying levels of education, professional disciplines, and theoretical orientations.

Upon entering the study, providers were randomized to one of three treatment conditions: Standard, Modular, or usual care. There were no significant differences across treatment conditions on any provider background characteristic. Given that the purpose of the current study was to assess different dimensions of integrity within codified treatments, only the Standard and Modular treatment arms were examined.

Providers assigned to the Standard condition were trained by experts in the field over a 6-day period to implement three Standard EBTs, which featured manualized instructions and prescribed both the order and number of treatment sessions (e.g., the *Coping Cat* Kendall et al. 1990 treatment manual dictates 16–20 sessions for treatment). Providers treating clients with a primary problem area of anxiety utilized individual cognitive behavioral

Table 1 Provider demographics ($n = 56$)

Characteristics	*n*	%
Most advanced educational degree		
Master's (LCSW, MSW, MA)	43	76.80
Doctorate (PhD, PsyD, MD)	13	23.20
Professional discipline		
Social worker	22	39.30
Psychologist or psychiatrist	14	25.00
Behavior health specialist	9	16.10
Counselor	6	10.70
Marriage and family provider	3	5.40
Theoretical orientation		
Cognitive-behavioral	23	41.10
Eclectic	14	25.00
Psychodynamic	10	17.90
Family systems	4	7.10

therapy focused on psychoeducation, relaxation techniques, and gradual exposure to feared objects from the *Coping Cat* treatment manual. Providers seeing clients with a primary problem area of depression used individual cognitive behavioral therapy for depression from the *Primary and Secondary Control Enhancement Training* (*PASCET*; Weisz et al. 2005) treatment manual. Lastly, providers treating youths with a primary problem area of conduct implemented behavioral parent training in the form of the *Defiant Children* (Barkley 1997) treatment manual.

Providers assigned to the Modular condition participated in a 6-day training, led by the same experts who conducted the Standard training, on the *MATCH* treatment manual (Chorpita and Weisz 2005), which is composed of practices corresponding to those in the Standard protocols for anxiety, depression, and conduct problems. Unlike its standardized counterpart, however, *MATCH* utilizes a flexible decision-making algorithm that encourages providers to focus on the primary problem area, while allowing some flexibility in the sequence and content of sessions to address any interfering events that may have arisen. For example, if treatment began with a focus on anxiety, but it became apparent that the client was not motivated to engage in exposures, then the provider could choose to implement a practice from another part of the protocol (e.g., creating a rewards system) in order to increase the client's motivation before returning to the anxiety protocol. The preferred logic and flow through the *MATCH* protocol was codified in detailed flowcharts.

Throughout the course of the study, providers in both the Standard and Modular conditions received weekly individual consultations from doctoral-level study staff. During these consultation meetings, study staff and providers discussed the events that occurred in the latest treatment session and collaboratively developed an appropriate plan for the next session. The purpose of these meetings was to ensure that providers were adhering to the principles of their assigned treatment arm and competently implementing the therapy.

Youth Participant Sample

Youth participants ($n = 124$) averaged 10.19 years (SD = 1.76) in age and were predominately male (68.50 %). Fifty-nine (47.6 %) were Caucasian, 35 (28.2 %) were of mixed ethnicity, 11 (8.9 %) were African American, 10 (8.1 %) were Latino or Latina, and 4 (3.2 %) were Asian American or Pacific Islander. Annual family income was less than $40,000 for 51.6 % of the sample of youths, $40,000–$79,999 for 22.6 % of the sample, $80,000–$119,999 for 13.8 % of the sample, and more than $120,000 for 6.4 % of the sample. The youths' primary caregivers, who self-nominated to be informants on study measures, were predominantly female (71.8 %), ranging in age from 24 to 74 years (*Mean* = 40.95; SD = 9.31); 36.3 % of the sample of youths lived in single-parent households. Youths were required to meet criteria for the Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev; DSM-IV-TR; American Psychiatric Association 2000) disorders, which were assessed via the Children's Interview for Psychiatric Symptoms (Weller et al. 1999a, b), or clinically-elevated levels of symptomatology in the areas of anxiety, depression, and/or conduct (cf. Weisz et al. 2012 for a detailed diagnostic composition of the sample). Youths' focus of treatment at baseline was identified from consideration of the clinical interview, scores on standardized pre-treatment assessment measures, and youth- and caregiver-reported top problems, yielding the following distribution in this sample: anxiety: 32.3 %, depression: 22.6 %, conduct problems: 45.2 %.

Measures

Consultation Record (Standard and Modular Versions)

The Consultation Record (Ward et al. 2013) is a measure designed to record strategies and content from previous treatment session(s) and to plan content for subsequent session(s). The Consultation Record was completed for every treatment session held prior to weekly consultation meetings between post-doctoral study staff and providers, and is organized into a matrix of checkboxes in which rows list practices corresponding to Standard or Modular session content (e.g., a time out procedure) and columns represent questions related to the practices in the rows of the measure (e.g., was this practice assigned for homework?). Content was considered to be covered in a session if the provider completed most of the main steps associated with the therapeutic practice. Although some research suggests that providers have a tendency to over-report the number and extensiveness of their delivered practices (Carroll and Rounsaville 2007; Hurlburt et al. 2010), other, recent findings suggest that providers are generally consistent with treatment experts in reporting their adherence to the intervention (Chapman et al. 2013). Additionally, the Consultation Record is novel is that it involves a structured interview conducted by an expert study consultant, who is trained to ask validating questions while completing the measure. When compared with audio and video recordings of treatment sessions, the Consultation Record demonstrated strong agreement on coverage of session content (Standard: Mean ICC = .74, Modular: Mean ICC = .71; Ward et al. 2013); thus, we used Consultation Record values for each session as the indicator of session content for all analyses.

Procedures and Data Preparation

Approval by the Institutional Review Boards of Judge Baker Children's Center (affiliated with Harvard Medical School) and the University of Hawaii at Manoa was obtained at the start of the clinical trial.

Coordination Rules

Given that one of the major aims of this study was to examine patterns of EBT implementation within community mental health settings, integrity measurement in the current study focused primarily on the sequencing of practices. Other factors associated with the construct of treatment integrity, such as the quality of services or the provider's competence in delivering the protocol content, were carefully and meticulously monitored by expert consultants on a weekly basis during the duration of the randomized effectiveness trial. In the present study, integrity of the services delivered in both the Standard and Modular conditions was assessed according to three sets of coordination rules: (1) PC, (2) flexible PS (FPS), and (3) linear PS (LPS).

PC coordination rules considered the implementation of any prescribed practice from the protocol during a given treatment session to be evidence of treatment integrity. For example, if a provider covered exposures for anxiety, one of the practices featured in the *Coping Cat* treatment manual, in a treatment session, that session was considered to meet criteria for integrity to PC. Likewise, if a provider covered a practice outside of the protocol (e.g., assigned a journal writing exercise, a practice that was not prescribed by any of the protocols in the randomized effectiveness trial) during a particular session, that session would not meet criteria for integrity to PC.

FPS coordination rules followed the same sequencing procedures featured in the decision-making flowcharts from the *MATCH* protocol (Chorpita and Weisz 2005), which suggest a basic treatment plan with a default sequence of practices for each of the primary problem areas (i.e., anxiety, depression, and conduct), but allow for some flexibility in the sequencing of the treatment plan if interference arises. In other words, the *MATCH* flowcharts would allow a provider to jump to a procedure that instructs caregivers on how to modify their child's behaviors through the distribution of rewards in the midst of an episode of care targeting youth depression if that child's lack of motivation was becoming a barrier to treatment. With regards to the coordination rules, the sessions in this example would meet criteria for integrity to FPS given that they adhere to the sequencing prescribed by the *MATCH* flowcharts, which are intended to represent a logical flow of practices.

Lastly, LPS coordination rules required session content to be arranged in a linear sequence in order to be considered to meet criteria for treatment integrity. As an example, in the case of a youth with anxiety problems, if a provider were to construct a fear ladder in one session and implement exposures for anxiety in the following session, then the session covering exposures for anxiety would achieve integrity to LPS because the *Coping Cat* protocol indicates that those two practices (i.e., fear ladder and exposures) should be delivered in subsequent sessions. If, however, the provider were to construct a fear ladder in one session, skip exposures for anxiety, and move directly onto the next practice in the protocol, then the session following the construction of the fear ladder would not achieve integrity to LPS because it did not adhere to a linear sequencing of practices.

Integrity Scoring

Sessions from both the Standard and Modular treatment arms of the randomized effectiveness trial were scored for integrity across the three sets of coordination rules by comparing the session content codified by the Consultation Record to "keys," or lists of the PC and PS that would meet criteria for integrity, for each set of coordination rules. Specifically, integrity to PC was assessed by comparing the content of each session to keys that listed all of the practices in the *MATCH*, or *Coping Cat*, *PASCET*, and *Defiant Children* protocols depending on the treatment arm to which the provider was randomized. Integrity to FPS and LPS was assessed by referencing the content from the session of interest (i.e., the index session) and the immediately preceding session (i.e., the previous session), and then comparing the index session–previous session pairing to the FPS and LPS keys. To expand on the previous example describing two subsequent treatment sessions implementing a fear ladder procedure and exposures for anxiety, respectively, with a focus on the latter session under the LPS coordination rules, exposures for anxiety would be considered to be the content in the index session and the fear ladder procedure would be considered to be the content in the previous session. The exposures and fear ladder pairing would then be subjected to a comparison to the LPS key and inspected for a match. In this particular case, a match would be identified because the exposures and fear ladder pairing adheres to the LPS coordination rules and is thus listed as an allowable pairing in the LPS key, and the session would be considered to meet criteria for integrity to LPS. This study only compared index session content to content from the immediately preceding session because treatment decisions about the sequencing of practices often depend primarily on the previous session's content (e.g., only implement procedure B if

procedure A has been fully covered; use procedure D if interference arises after procedure C). In the event that multiple practices were delivered in the same treatment session (e.g., a provider covered relaxation procedures and cognitive exercises in a single session), credit for integrity of the session was awarded if any of the content from that session matched the coordination key. In other words, credit for integrity was given based on what went right as opposed to what went wrong (separate analyses examined treatment integrity when all, as opposed to any, practices in a session matched the coordination keys and found a similar pattern of results). To follow the previous example, if the provider had implemented exposures and psychoeducation for anxiety in the index session, the session would still be considered to have integrity to LPS because of the exposures and fear ladder pairing. Matches between the session content codified by the Consultation Record and each of the coordination keys were systematically identified using Microsoft Access 2010. Coordination rules and their corresponding keys were developed by a team of experts, all of whom had experience and expertise with the *Coping Cat*, *PASCET*, *Defiant Children*, and *MATCH* protocols, and are available from the corresponding author upon request.

Types of Modifications

Because it was anticipated that at least a portion of sessions would be adapted from the protocol, we sought to catalog the types of modifications made in Standard and Modular sessions. Modifications were grouped into the following categories: "skipping," which meant that a session jumped ahead or behind in the protocol; "revisiting," which meant that previously covered content was returned to later in the treatment episode (this category did not include contiguous repetition of a procedure as immediately repeating or reviewing a therapeutic practice is probably not likely to be considered a modification to most treatment protocols); "problem area," which involved implementing content that was not directly related to the client's primary problem area, and "other practice," which involved implementing content outside of the treatment manual (e.g., clinical intake assessment, crisis management, grief processing). Because the *MATCH* flowcharts allowed for practices to be both immediately repeated and revisited later on during the course of treatment, revisiting content was not considered a modification under the FPS coordination rules.

The frequency of each type modification was assessed using a similar method as was used to score the treatment integrity of this study. First, sessions potentially involving a protocol modification were identified from the Standard sessions that did not meet criteria for integrity to LPS and from the Modular sessions that did not meet criteria for integrity to FPS. Those sessions were then compared to keys that were developed to reflect each type of modification and examined for matches. For example, the key for "skipping" modifications included index session–previous session pairings such as (Practices C–A) and (Practices B–E), and was then compared to session content codified by the Consultation Record with matches between the session content and the key indicating that a skipping modification was made in that session.

Analyses

The number of sessions meeting criteria for integrity was computed across the three sets of coordination rules (PC, FPS, and LPS) for each treatment arm (Standard and Modular). Percentages of sessions achieving integrity were generated by dividing the number of Standard and Modular sessions meeting criteria for integrity to each set of coordination rules from the total number of sessions for the corresponding treatment arm. χ^2 analyses were then conducted to assess whether the percentage of Standard and Modular sessions achieving integrity to each set of coordination rules was significantly different across conditions. Similar analyses were used to assess the proportion of sessions involving each type of protocol modification. Given the exploratory nature of this study, no a priori hypotheses were made.

Results

Integrity Under Coordination Rules

A total of 924 Standard sessions and 873 Modular sessions were assessed for integrity to the three sets of coordination rules. Standard episodes of care ranged from 1 to 48 sessions per client ($Mean = 14.90$) with a range of 1 to 7 ($Mean = 1.27$) practices covered per session. Modular episodes of care ranged from 1 to 35 sessions per client ($Mean = 13.43$) with a range of 1–5 ($Mean = 1.33$) practices covered per session.

The vast majority of Standard (900; 97.4 %) and Modular (825; 94.5 %) sessions met criteria for integrity to PC. The proportion of sessions achieving integrity under the PC coordination rules was not significantly different between conditions ($\chi^2 = 1.08$, $df = 1$, $p = .298$). Further analyses of these sessions revealed that adherence to the PC coordination rules ranged from 80.0–100.0 % ($Mean =$ 96.6 %) for Standard and 76.9–100.0 % ($Mean = 94.8$ %) for Modular across providers. Integrity to PC ranged from 67.7–100.0 % ($Mean = 96.6$ %) for Standard and 50.0–100.0 % ($Mean = 93.8$ %) for Modular across clients.

A high proportion of Standard ($n = 844$; 91.3 %) and Modular ($n = 698$; 79.95 %) sessions also achieved integrity under the FPS coordination rules; however the percentage of sessions with integrity to FPS was significantly higher for Standard than for Modular ($\chi^2 = 5.28$, $df = 1$, $p = .022$). Adherence to the FPS coordination rules ranged from 0.0–100.0 % (*Mean* = 82.5 %) for Standard and 33.3–100.0 % (*Mean* = 82.2 %) for Modular across providers. Integrity to FPS ranged from 0.0–100.0 % (*Mean* = 87.4 %) for Standard and 0.0–100.0 % (*Mean* = 79.2 %) for Modular across clients.

When scored using the LPS coordination rules, 76.3 % of Standard ($n = 705$) and 63.8 % of Modular ($n = 557$) sessions met criteria for integrity. The proportion of sessions achieving integrity under the LPS coordination rules was not significantly different between conditions ($\chi^2 = 3.72$, $df = 1$, $p = .054$). Adherence to the LPS coordination rules ranged from 0.0–100.0 % (*Mean* = 72.2 %) for Standard and 22.2–100.0 % (*Mean* = 69.3 %) for Modular across providers. Integrity to LPS ranged from 0.0–100.0 % (*Mean* = 74.9 %) for Standard and 0.0–100.0 % (*Mean* = 67.2 %) for Modular across clients.

Protocol Modifications

Of the 924 total Standard sessions, 403 sessions contained at least one index session–previous session pairing that did not match the LPS key. From those sessions, the most common modification was skipping ahead or behind in the protocol ($n = 339$ sessions; 84.1 %). Revisiting prior practices was also a frequently occurring modification made in sessions ($n = 256$ sessions; 63.5 %). Using a practice outside of the manual ($n = 45$ sessions; 11.2 %), and covering a practice from a different problem area ($n = 6$ session; 1.5 %) were the two least common modifications, respectively. The percentage of sessions with modifications exceeds 100 % as multiple modifications could occur within an individual session.

Of the 873 total Modular sessions, 282 sessions contained at least one index session–previous session pairing that did not follow the FPS coordination rules. Common protocol modifications, from most to least common, were skipping ($n = 85$ sessions; 30.14 %), other practice ($n = 77$ sessions; 27.30 %), and problem area ($n = 67$ session; 23.76 %), respectively.

Discussion

This study examined the implementation of two EBTs, sharing similar content but different PS, using a multidimensional integrity measurement approach that evaluated integrity along separate dimensions of PC and PS. By differentiating between these two dimensions of integrity, we hoped to better understand where providers tend to modify their protocol delivery in order to inform mechanisms for more feasibly implementing EBTs into service settings.

To examine sequencing patterns within EBT implementation, treatment integrity was measured using three sets of coordination rules, which assessed for the presence of evidence-based practices within sessions as well as their sequencing during delivery. Findings revealed that providers used practices from the protocol in the vast majority of their treatment sessions, and that these high rates of adherence to the protocol content were not different across treatment arms. These results are consistent with integrity analyses reported by Weisz et al. (2012), using a subsample of approximately 200 Standard and Modular sessions and applying the equivalent of the PC coordination rules to coded recordings of therapy sessions. Further, findings converge with the observations by Palinkas et al. (2013), which found that the providers reported frequently using content from the manuals with other clients after completing their participation in the randomized effectiveness trial.

Although relatively high proportions of Standard and Modular sessions also met criteria for integrity to FPS and LPS, findings suggest that protocol modifications may be more often associated with providers' decision to adapt the sequencing of practices rather than to use alternative content. That is, in comparison to the approximately 3–5 % of sessions in which providers chose to implement content from outside of the protocol, about 10–20 % of Standard and Modular sessions, respectively, were modified in a way that did not follow the *MATCH* (Chorpita and Weisz 2005) flowcharts, which were used to represent the type of practice arrangement allowed by a logic-based, adaptable protocol. Additionally, approximately one-quarter to one-third of Standard and Modular sessions, respectively, were arranged in a non-linear order. Overall, these findings showed that providers covered practices from the protocol in a linear sequence (similar to the sequences featured in traditional EBT protocols) for most of their sessions, and suggest that when modifications to the sequencing of practices are made, they tend to be predictable and in line with the arrangements allowed by adaptable treatment protocols.

Despite a large proportion of sessions meeting criteria for integrity to each of the three sets of coordination rules, it is interesting to note that roughly one quarter of Standard and Modular sessions modified their corresponding protocol's sequence of practices (i.e., Standard sessions involving modifications to the LPS coordination rules, and Modular sessions involving modifications to the FPS coordination rules). Because the Modular treatment arm

allowed for greater adaptability in the sequencing of practices, one may have hypothesized that providers randomized to this condition would make fewer sequencing modifications than Standard providers. However, findings showed that providers in both treatment arms pushed against the boundaries of their respective protocols, and implemented the EBTs with greater flexibility than what was explicitly allowed by the protocol. These findings may have implications for future EBT implementation and protocol design efforts given the recent attention that has been placed on developing protocols that are more adaptable in nature (e.g., Chorpita et al. 2005; Kendall and Beidas 2007; Stirman et al. 2013a). Although increased protocol adaptability has demonstrated several benefits including more favorable clinical outcomes (Chorpita et al. 2013; Weisz et al. 2012) and the opportunity for providers to meet clients where they are developmentally (Chorpita and Daleiden 2014), protocols require some structure to ensure that high quality, evidence-based services are still being provided. The balance between protocol adaptability and structure is one that should be carefully considered, especially if providers are likely to extend implementation beyond the protocol's prescribed flexibility.

The second aim of this study was to examine the frequency and nature of modifications made during EBT implementation. Findings showed that within the Standard treatment arm, providers were most likely to modify the protocol by skipping or revisiting practices. Although "other practice" and "problem area" modifications were prevalent, they did not occur as frequently. Modifications made by therapists randomized to the Modular treatment arm were more evenly distributed with similar numbers of skipping, problem area, and other practice modifications across sessions. The differences in the types of modifications made during delivery suggest that providers' clinical judgment continues to play a role in the implementation of EBTs, and raise questions about the need for structured procedures that can leverage providers' expertise to individualize treatment when needed.

Given that the Modular treatment arm was shown to have the best outcomes in previous studies (Chorpita et al. 2013; Weisz et al. 2012), a note of caution is warranted regarding what may appear to be lower integrity scores for this condition. Because providers in the Modular condition were both implicitly (via *MATCH*'s flexible treatment design) and explicitly (by *MATCH* trainers and consultants) encouraged to consider their clients' current needs and empirical feedback on their clients' progress when planning the next step of treatment, the modifications noted in our current analyses are not necessarily problems with integrity to the Modular protocol itself. By design, the treatment integrity scores under the FPS coordination rules are not an indicator of how closely providers adhered to the Modular protocol, but rather, how closely they followed the *MATCH* flowcharts. For instance, if a client revealed the occurrence of an acute stressor (e.g., housing issues or an incident with the Department of Child and Family Services) at the beginning of a treatment session, a provider in the Modular treatment arm may decide to alter the original treatment plan in order to address the interference—a modification that adheres to the principles of the Modular treatment arm, but is not outlined in the *MATCH* flowcharts, nor thus included in the FPS key. Similarly, a supervisor may actually instruct a provider to implement a practice outside of the *MATCH* flowcharts to attend briefly to another behavior that may have become increasingly more problematic. In either of these instances, providers would have diverged from the *MATCH* flowcharts, but also would have continued to adhere to the overarching treatment principles of the Modular protocol. Additionally, it should be noted that the *MATCH* flowcharts have not been empirically validated in any studies to date. Instead, the outcomes previously referenced are associated with the implementation of the Modular protocol. This discrepancy highlights the complexity surrounding integrity measurement of adaptable interventions, and emphasizes the need to develop integrity measurement resources that can assess integrity at different levels of detail.

Although the present study provides an important, initial examination of treatment integrity along different structural dimensions (i.e., integrity to PC and integrity to PS), a couple of caveats are in order. The first is in response to our definition of treatment integrity. For the purposes of this study, we chose to focus solely on integrity to content (i.e., the presence of specific practices within a treatment session) and integrity to sequencing (i.e., the order of practices throughout the treatment episode), and thus made an assumption about the quality of the practices being implemented. Although the quality of intra-session content was reviewed on a weekly basis by study consultants and in the analyses of previous studies (Ward et al. 2013; Weisz et al. 2012) via recordings of the treatment sessions, the quality of practices as well as some of the other components encompassing the construct of treatment integrity (e.g., provider competence) were not directly examined in the present study.

Another limitation of this study relates to the generalizability of the EBT implementation patterns. Because study providers met with expert consultants on a weekly basis to discuss their client's treatment plan, it is unknown whether the proportions of sessions achieving integrity under PC framework (i.e., the sessions that involved a practice from the protocol), let alone the LPS framework (i.e., the sessions that implemented practices in a linear order), would be maintained in typical community settings. Future research will need to investigate whether similar

implementation patterns would be found within naturally occurring community mental health contexts that do not involve regular university-based consultation to manage treatment integrity. One might expect that integrity levels—at least those involving sequencing—might be lower overall in a non-research context (cf. Palinkas et al. 2013).

Despite these limitations, the present study is among the first to examine systematically where challenges to EBT implementation might occur with respect to defined adaptations to treatment structure. No single study can outline all the reasons why EBT utilization continues to face implementation barriers; however, this current study does provide a lens for identifying points of potential strain in EBT implementation. These findings suggest in general that there is utility to thinking about integrity measurement along independent structural dimensions of content and sequencing and about the patterns of use of prescribed practices. Findings also point to opportunities to address specific problems in implementation on the one hand (e.g., managing specific types of drift), and to consider revisiting the structure of treatments on the other. Such questions are akin to asking whether we urge pedestrians to "keep off the grass" or whether we pave their well-worn footpaths (or some of both). Although more research is needed to answer which strategy of integrity measurement is best, there is value in these paths beginning to come more clearly into view.

References

American Psychiatric Association. (2000). *American Psychiatric Association Diagnostic and statistical manual of mental disorders: DSM-IV-TR*. Washington, DC: American Psychiatric Association.

Barkley, R. A. (1997). *Defiant children: A provider's manual for assessment and parent training* (2nd ed.). New York: Guilford Press, New York, NY.

Bickman, L. (2008). A measurement feedback system (MFS) is necessary to improve mental health outcomes. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(10), 1114–1119. doi:10.1097/CHI.0b013e3181825af8.

Bickman, L., Kelley, S. D., Breda, C., de Andrade, A. R., & Riemer, M. (2011). Effects of routine feedback to providers on mental health outcomes of youths: Results of a randomized trial. *Psychiatric Services, 62*(12), 1423–1429. doi:10.1176/appi.ps.002052011.

Calhoun, K. S., Moras, K., Pilkonis, P. A., & Rehm, L. P. (1998). Empirically supported treatments: Implications for training. *Journal of Consulting and Clinical Psychology, 66*(1), 151–162. doi:10.1037/0022-006X.66.1.151.

Carroll, K. M., & Rounsaville, B. J. (2007). A vision of the next generation of behavioral therapies research in the addictions. *Addiction, 102*(6), 850–862.

Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology, 66*(1), 7–18. doi:10.1037/0022-006X.66.1.7.

Chapman, J. E., McCart, M. R., Letourneau, E. J., & Sheidow, A. J. (2013). Comparison of youth, caregiver, therapist, trained, and treatment expert raters of therapist adherence to a substance abuse treatment protocol. *Journal of Consulting and Clinical Psychology, 81*(4), 674–680. doi:10.1037/a0033021.

Chorpita, B. F., & Daleiden, E. L. (2014). Structuring the collaboration of science and service in pursuit of a shared vision. *Journal of Clinical Child and Adolescent Psychology*, *43*(2), 323–338. doi:10.1080/15374416.2013.828297.

Chorpita, B. F., Daleiden, E. L., & Weisz, J. R. (2005). Modularity in the design and application of therapeutic interventions. *Applied and Preventive Psychology, 11*(3), 141–156. doi:10.1016/j.appsy.2005.05.002.

Chorpita, B. F., & Southam-Gerow, M. (2006). *Fears and anxieties*. New York: Guilford Press.

Chorpita, B. F., & Weisz, J. R. (2005). *Modular approach to therapy for children with anxiety, depression, or conduct problems*. Honolulu, HI: University of Hawaii at Manoa; Boston: Judge Baker Children's Center; Harvard Medical School.

Chorpita, B. F., Weisz, J. R., Daleiden, E. L., Schoenwald, S. K., Palinkas, L. A., Miranda, J., et al. (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.

Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2005). Evaluating integrity: Predictive validity for a measure of competent adherence to the Oregon Model of Parent Management Training. *Behavior Therapy,* 36(1), 3–13. doi:10.1037/0022-006X.67.5.711, 10.1037//0022-006X.65.5.821.

Hoagwood, K. E., Vogel, J. M., Levitt, J. M., D'Amico, P. J., Paisner, W. I., & Kaplan, S. J. (2007). Implementing an evidence-based trauma treatment in a state system after September 11: The CATS Project. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(6), 773–779. doi:10.1097/chi.0b013e3180413def.

Hurlburt, M. S., Garland, A. F., Nguyen, K., & Brookman-Frazee, L. (2010). Child and family therapy process: Concordance of therapist and observational perspectives. *Administration and Policy in Mental Health and Mental Health Services Research, 37*(3), 230–244. doi:10.1007/s10488-009-0251-x.

Kendall, P. C., & Beidas, R. S. (2007). Smoothing the trail for dissemination of evidence-based practices for youth: Flexibility within fidelity. *Professional Psychology: Research and Practice, 38*(1), 13–20. doi:10.1037/0735-7028.38.1.13.

Kendall, P. C., Gosch, E., Furr, J. M., & Sood, E. (2008). Flexibility within fidelity. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(9), 987–993. doi:10.1097/CHI.0b013e31817eed2f.

Kendall, P. C., Kane, M., Howard, B., & Siqueland, L. (1990). *Cognitive-behavioral treatment of anxious children*. Ardmore, PA: Workbook Publishing.

Lambert, M. J., Harmon, C., Slade, K., Whipple, J. L., & Hawkins, E. J. (2005). Providing feedback to psychotherapists on their patients' progress: Clinical results and practice suggestions. *Journal of Clinical Psychology, 61*(2), 165–174.

Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., Nielsen, S. L., & Hawkins, E. J. (2001). The effects of providing providers with feedback on patient progress during psychotherapy: Are outcomes enhanced? *Psychotherapy Research, 11*(1), 49–68. doi:10.1093/ptr/11.1.49.

Lonigan, C. J., Elbert, J. C., & Johnson, S. B. (1998). Empirically supported psychosocial interventions for children: An overview. *Journal of Clinical Child Psychology, 27*(2), 138–145.

McLeod, B. D., Southam-Gerow, M. A., Tully, C. B., Rodríguez, A., & Smith, M. M. (2013). Making a case for treatment integrity as

a psychosocial treatment quality indicator for youth mental health care. *Clinical Psychology: Science and Practice, 20*(1), 14–32. doi:10.1111/cpsp.12020.

National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention and Deployment. (2001). *Blueprint for change: Research on child and adolescent mental health*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health.

Office of the Surgeon General. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services.

Office of the Surgeon General. (2004). *Report of the Surgeon General's Conference on children's mental health: A national action agenda*. Rockville, MD: U.S. Department of Health and Human Services.

Palinkas, L. A., Aarons, G. A., Chorpita, B. F., Hoagwood, K., Landsverk, J., & Weisz, J. R. (2009). Cultural exchange and the implementation of evidence-based practices: Two case studies. *Research on Social Work Practice, 19*(5), 602–612. doi:10.1177/1049731509335529.

Palinkas, L. A., Weisz, J. R., Chorpita, B. F., Garland, A., Hoagwood, K. E., Landsverk, J., et al. (2013). Use of evidence-based treatments for youth mental health subsequent to a randomized controlled effectiveness trial: A qualitative study. *Psychiatric Services, 64*(11), 1110–1118. doi:10.1176/appi.ps.004682012.

Perepletchikova, F., Hilt, L. M., Chereji, E., & Kazdin, A. E. (2009). Barriers to implementing treatment integrity procedures: Survey of treatment outcome researchers. *Journal of Consulting and Clinical Psychology, 77*(2), 212–218. doi:10.1037/a0015232.

Perepletchikova, F., & Kazdin, A. E. (2009). Treatment integrity and therapeutic change: Issues and research recommendations. *Clinical Psychology: Science and Practice, 12*(4), 365–383. doi:10.1093/clipsy/bpi045.

President's New Freedom Commission on Mental Health. (2003). *Achieving the promise*: *Transforming mental health care in America*: *Final report*. DHHS Publication number SMA-03-3832. Rockville, MD.

Proctor, E. K. (2004). Leverage points for the implementation of evidence-based practice. *Brief Treatment and Crisis Intervention, 4*(3), 227. doi:10.1093/brief-treatment/mhh020.

Regan, J., Daleiden, E. L., & Chorpita, B. F. (2013). Integrity in mental health systems: An expanded framework for managing uncertainty in clinical care. *Clinical Psychology: Science and Practice, 20*(1), 78–98. doi:10.1111/cpsp.12024.

Schoenwald, S. K., Garland, A. F., Chapman, J. E., Frazier, S. L., Sheidow, A. J., & Southam-Gerow, M. A. (2011). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research, 38*(1), 32–43. doi:10.1007/s10488-010-0321-0.

Schoenwald, S. K., Kelleher, K., & Weisz, J. R. (2008). Building bridges to evidence-based practice: The MacArthur Foundation Child System and Treatment Enhancement Projects (Child STEPs). *Administration and Policy in Mental Health and Mental Health Services Research, 35*(1–2), 66–72. doi:10.1007/s10488-006-0047-1.2006-08150-01010.1007/s10488-006-0047-1.

Southam-Gerow, M. A., Chorpita, B. F., Miller, L. M., & Gleacher, A. A. (2008). Are children with anxiety disorders self-referred to a university clinic like those from the public mental health system? *Administration and Policy in Mental Health and Mental Health Services Research, 35*, 168–180. doi:10.1007/s10488-007-0154-7.

Southam-Gerow, M. A., & McLeod, B. D. (2013). Advances in applying treatment integrity research for dissemination and implementation science: Introduction to special issue. *Clinical Psychology: Science and Practice, 20*, 1–13.

Southam-Gerow, M. A., Weisz, J. R., Chu, B. C., McLeod, B. D., Gordis, E. B., & Connor-Smith, J. K. (2010). Does cognitive behavioral therapy for youth anxiety outperform usual care in community clinics? An initial effectiveness test. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(10), 1043–1052.

Stirman, S. W., Calloway, A., Toder, K., Miller, C. J., DeVito, A. K., Meisel, S. N., et al. (2013a). Community mental health provider modifications to cognitive therapy: Implications for sustainability. *Psychiatric Services, 64*(10), 1056–1059. doi:10.1176/appi.ps.201200456.

Stirman, S. W., Miller, C. J., Toder, K., & Calloway, A. (2013b). 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.

Travis, J. K., & Brestan-Knight, E. (2013). A pilot study examining trainee treatment session fidelity when parent–child interaction therapy (PCIT) is implemented in community settings. *The Journal of Behavioral Health Services and Research, 40*(3), 342–354. doi:10.1007/s11414-013-9326-2.

Ward, A. M., Regan, J., Chorpita, B. F., Starace, N., Rodriguez, A., et al. (2013). Tracking evidence based practice with youth: Validity of the match and standard manual consultation records. *Journal of Clinical Child and Adolescent Psychology, 42*(1), 44–55. doi:10.1080/15374416.2012.700505.

Weersing, V. R., Weisz, J. R., & Donenberg, G. R. (2002). Development of the therapy procedures checklist: A provider-report measure of technique use in child and adolescent treatment. *Journal of Clinical Child and Adolescent Psychology, 31*(2), 168–180. doi:10.1037//0003-066X.51.7.689.

Weisz, J. R., Chorpita, B. F., Palinkas, L. A., Schoenwald, S. K., Miranda, J., Bearman, S., et al. (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:10.1007/s10488-007-0151-x.2008-00915-01110.1007/s10488-007-0151-x.

Weisz, J. R., & Gray, J. S. (2008). Evidence-based psychotherapy for children and adolescents: Data from the present and a model for the future. *Child and Adolescent Mental Health, 13*(2), 54–65. doi:10.1111/j.1475-3588.2007.00475.x.

Weisz, J. R., Jensen-Doss, A., & Hawley, K. M. (2006). Evidence-based youth psychotherapies versus usual clinical care: A meta-analysis of direct comparisons. *American Psychologist, 61*(7), 671–689. doi:10.1207/s15374424jccp3401_11.2005-01144-01110.1207/s15374424jccp3401_11.

Weisz, J. R., & Kazdin, A. E. (2010). *The present and future of evidence-based psychotherapies for children and adolescents* (pp. 557–572). New York: Guilford Press.

Weisz, J. R., Moore, P. S., Southam-Gerow, M. A., Weersing, V. R., Valeri, S. M., & McCarty, C. A. (2005). *Provider's manual PASCET: Primary and secondary control enhancement training program* (3rd ed.). Los Angeles: University of California.

Weisz, J. R., Weiss, B., Han, S. S., Granger, D. A., & Morton, T. (1995). Effects of psychotherapy with children and adolescents revisited: A meta-analysis of treatment outcome studies. *Psychological Bulletin, 117*(3), 450–468.

Weller, E. B., Weller, R. A., Rooney, M. T., & Fristad, M. A. (1999a). *Children's interview for psychiatric syndromes—Parent version (P-ChIPS)*. Arlington, VA: American Psychiatric Association, Arlington, VA.

Weller, E. B., Weller, R. A., Rooney, M. T., & Fristad, M. A. (1999b). *Children's interview for psychiatric syndromes: ChIPS*. Arlington, VA: American Psychiatric Association, Arlington, VA.