Therapists’ Consistency in Following Their Treatment Plans for Sensory Integrative and Perceptual-Motor Therapy

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Key Words: clinical competence • methods, occupational therapy • modalities, occupational therapy

Objectives. Treatment integrity is concerned with whether treatment conditions as provided are consistent with specifications for the treatment. Therapists’ consistency in following their treatment plans that called for the use of sensory integrative and perceptual-motor techniques was evaluated.

Method. Three occupational therapists were rated on their consistency in 46 sessions each of sensory integrative and perceptual-motor therapy. Ratings were made both earlier (1 month) and later (4 months) in treatment. Consistency was rated with a five-point scale for 10 categories of the treatment plans.

Results. Overall consistency did not differ significantly (86% for sensory integrative techniques and 79% for perceptual-motor techniques). Perceptual-motor activities showed less consistency early in treatment but approached the level for sensory integrative techniques by later treatment sessions. Consistency differed significantly among therapists for sensory integrative activities that addressed tactile defensiveness and perceptual-motor activities associated with fine coordination and dexterity.

Conclusion. Despite the less structured, more child-centered nature of sensory integrative techniques, consistency in using these techniques was as high as that found for more scripted, program-centered, perceptual-motor techniques. Therapists reported that gaining the interest and attention of some children with the more structured perceptual-motor activities was more difficult early in treatment but could be achieved with time. Differences in consistency among therapists require verification with a larger sample.

The terms treatment fidelity (Barber, 1973) and treatment integrity (Ottenbacher, 1991) have been used to refer to the extent to which treatment conditions as provided agree with the specifications for the treatment. In research, a lack of treatment integrity has been viewed as a potential confounding variable that makes measuring a treatment effect difficult. Clinically, not establishing and maintaining treatment integrity could jeopardize achievement of treatment goals. The purpose of this study was to increase awareness of the factors that may affect treatment integrity in occupational therapy by evaluating therapists’ consistency in carrying out their plans for treatment that called for the use of sensory integrative and perceptual-motor techniques. Knowledge of therapists’ consistency is important for several reasons. For the clinician, this information may be useful in understanding one’s own approach and clinical reasoning (Fleming & Mattingly, 1994) in conducting therapy.
With access to a comparative baseline, therapists may gain insight into variation within their practices, begin to reflect on some of the sources of this variation, and predict its possible effect on outcome. For the researcher, this knowledge may indicate the need to control for treatment integrity as an aspect of study design as well as the steps necessary to gain this control.

In this article, consistency refers to the degree to which therapists follow their intended plan for treating a child, recognizing that there are a variety of factors that can influence how therapy unfolds both within and across treatment sessions. What might be viewed as less consistency may not represent a poor fit between theoretical concepts underlying therapy and how they operate in practice. Less consistency may indicate that a therapist has in fact been adaptive in modifying treatment to be sensitive to a child's current state in a way that is in total agreement with theory. This notion of how theory fits with practice implies more than just theoretical or scientific reasoning about what we can reliably predict will hold true for treatment in a wide range of situations. It also includes practical reasoning about what actions will lead to the most good for a person in a particular situation (Fleming & Mattingly, 1994).

Koomar and Bundy's (1991) distinction between the art and science of using sensory integrative techniques has provided a useful perspective on the notion of consistency in one's approach to treatment. Decisions about where to begin treatment and about adjusting activities to challenge the child; tapping and promoting a child's inner drive, self-direction, and growth in therapy; achieving a flow from one activity to the next; establishing rapport with a child; and reaching decisions about discontinuing treatment are part of the art of therapy. These decisions, which result in actions that are specific to a particular child, time, and situation, are based on practical reasoning. Planning a sequence of activities that is consistent with sensory integration theory, is directed at a child's underlying dysfunction, and promotes the accomplishment of desired goals are aspects of procedural or diagnostic reasoning that represent the science of therapy.

How these components of the art and science of therapy operate within the context of actual intervention is very much determined by the fact that in sensory integration treatment, therapy is self-directed by a child in a "play" environment. The treatment plan provides a general idea about the types of techniques that can be used to achieve treatment goals. However, it is how a child seeks out and responds to the activities that are introduced that establishes the need for ongoing modifications as the treatment proceeds (Bundy, 1991).

In perceptual-motor programming (Cratty, 1981; Kephart, 1971), a child is required to follow a predetermined sequence of activities with the goal of achieving the coordinated execution of a specific task (Clark, Mailoux, & Parham, 1989; Fiske & Murray, 1991; Murray & Anzalone, 1991). The focus of perceptual-motor activities on using practice and verbal guidance to train specific skills until they are done correctly represents a more program-centered than child-centered approach, with a strong emphasis on procedural reasoning. Some therapists may feel more confident in using perceptual-motor activities because the activities are more scripted and therefore more predictable in terms of the direction of a treatment session.

In the present study, we investigated several research questions to evaluate therapists' consistency in conducting therapy:

1. What is the consistency of following treatment plans when using sensory integrative and perceptual-motor treatment approaches?
2. Does consistency differ between the two approaches?
3. Is there a difference in consistency between the two approaches when sampled at different points in time across the entire span of treatment sessions?
4. Does consistency in conducting the two approaches differ among therapists?
5. For each approach, what is the consistency for treatment activities associated with the different performance components?

Method

Participants

Consistency in following treatment plans was determined for three therapists who had been part of a larger treatment efficacy study in which children with learning disabilities and sensory integration dysfunction had received 72 hours of either sensory integrative or perceptual-motor therapy (Humphries, Wright, Snider, & McDougall, 1992). These female participants were chosen for the present investigation because they had done the majority of the therapy in the treatment efficacy study and, therefore, provided the greatest number of treatment sessions for evaluating consistency. Two participants were certified in sensory integration assessment, and each had 13 years of experience in providing clinical treatments, including the use of sensory integrative and perceptual-motor techniques. One participant had experience in hospital and community treatment settings, another had practiced in hospital settings and privately, and the third was completing her certification in sensory integration assessment and had worked for 2 years in a hospital setting with no other prior experience.
Instrument

On the basis of the results of an initial assessment and ongoing treatment of a child, a participant designed treatment plans for the use of either sensory integrative or perceptual-motor techniques. The sensory processing components addressed by sensory integrative techniques included tactile discrimination; tactile defensiveness; and vestibular and proprioception activities, many of which incorporated elements of praxis. Praxis was not included as a separate performance component because of the low reliability of some of the key subtests (e.g., Imitation of Postures, Bilateral Motor Coordination) of the Southern California Sensory Integration Tests (Ayres, 1980) that are used for measuring praxis. At the time of our investigation, the Sensory Integration and Praxis Tests (Ayres, 1989) were not available. The motor components addressed by perceptual-motor techniques included gross coordination, fine coordination and dexterity, and visuomotor integration. These components reflected the focus of occupational therapists’ clinical practice in the community at the time of this investigation and their recommendations for conducting perceptual-motor treatment (Cratty, 1981).

The participants completed a separate treatment plan form for each performance component (see Figures 1 and 2). The form consisted of 10 categories of various aspects of treatment administration, including:

1. Treatment activities and equipment used
2. Sequence of using treatment activities and equipment
3. Number of repetitions in using treatment activities and equipment
4. Time to be spent on the treatment activities and equipment
5. Amount of verbal instructions to be given
6. Frequency of using shorter, simpler sentences in giving instructions
7. Frequency of using longer, more complex sentences in giving instructions
8. Amount of verbal feedback to be given
9. Frequency of using shorter, simpler sentences in giving verbal feedback
10. Frequency of using longer, more complex sentences in giving verbal feedback

Verbal instructions and feedback were included on the treatment forms to indicate the degree to which the participants believed that physical activities should be complemented by oral communication in adapting to a child’s needs. The balance of using simple or more complex language represents a lesser or greater degree of elaboration. Verbal instructions and praise from a therapist can help children monitor progress in treatment; modify their inaccurate perceptions of movement and body position in space; gain information on the movements they have accomplished when they are obtaining inadequate body feedback; and modify, control, or discontinue an undesirable action, such as impulsivity, in performing an activity (Koomar & Bundy, 1991).

Procedure

Treatment. Before beginning the treatments, the participants collaborated to decide which types of activities, materials, and equipment were most appropriate to sensory integrative or perceptual-motor techniques. To control for differences in participants’ personality, training, and experience in conducting therapy, each participant provided both perceptual-motor and sensory integrative treatments.

The emphasis of the sensory integrative techniques was on integrating vestibular, proprioceptive, and tactile-sensory inputs. Suspended overhead equipment provided various types of vestibular input essential to the therapy, and ongoing observations were made of a child’s adaptive responses. The goal was to provide a sensorimotor foundation upon which motor and perceptual skills, attention, and social-emotional responses are based (Fisher, Murray, & Bundy, 1991). The types of activities used were also consistent with those outlined in Fisher et al. (1991).

Activities to improve tactile discrimination included discriminating different textures, shapes, and objects; tracing sandpaper letters; and guessing which letters or numbers the therapist finger traced on the child’s arms or back. Tactile defensiveness was treated through rubbing the child’s arms, legs, and back briskly and lightly with different textures and degrees of firmness; rolling the child in a blanket, bubble paper, or carpet; commando crawling on textured surfaces, and using play dough, plastecine, and finger paints. Equipment such as nets, swings, trapezes, T-bars, equilibrium boards, scooter boards with or without ramps, and therapy balls provided proprioceptive and tactile input in conjunction with the vestibular input. The proprioceptive and kinesthetic centers involved in giving feedback from joints and muscles were stimulated by a variety of activities, including rolling a child in a blanket, rolling a therapy ball over a child with pressure, jumping, hopping, walking like animals, and throwing and catching heavy balls. Gross motor movements were achieved through skipping, tumbling, and jumping.

Perceptual-motor activities were designed to remediate specific skill deficits in visuomotor integration, fine coordination and dexterity, and gross coordination rather than to establish an overall improved sensorimotor foundation. Thus, specific skills to be learned were practiced. Fine coordination and dexterity activities included track-
ing through mazes, working with pegboards, completing dot-to-dot exercises, threading beads, cutting, pasting, manipulating small objects in one hand, playing card and marble games, and practicing tying shoeaces and securing fasteners. Visuomotor integration activities focused on copying and printing shapes, designs, letters, and numbers. Gross coordination activities included jumping jacks and stride jumps; skipping; hopping and tumbling; obstacle courses for developing motor planning; and pitching, catching, and targeting games (Cratty, 1981).

Observations. Two observers rated the participants' consistency in following their treatment plans. An additional observer was used to calculate interobserver reliabilities on a subset of the observations, but all percentages reported for consistency are based on the ratings of the two primary observers. All observers were psychometrists, allowing us to take advantage of their skills in observation and measurement and to avoid any bias that occupational therapists as observers might have had for a particular treatment.

The availability of the two primary observers limited the number of treatment sessions that could be observed. Initially, after about 1 month of therapy, 23 sessions were randomly selected from each treatment as a feasible number for observation. Each of these 46 sessions represented a different child. After approximately 4 months of treatment another 46 observation sessions (23 in each treatment group) of the same children and participants were randomly selected. One participant was observed for 40 sessions (20 per treatment), another for 28 sessions (14 per treatment), and the third for 24 sessions (12 per treatment). The children in each treatment remained in that treatment for the duration of the study, with no crossing over or counterbalancing of the order of treatments.

To avoid bias in ratings, the same observer rated a particular participant and child at both the 1-month and 4-month observation sessions. The 3 months between observation sessions was thought to be sufficient to minimize the possible effects of contamination due to memory of what had been observed previously. Observers did...
Performance Component:
Sensorimotor Component
Sensory: vestibular

<table>
<thead>
<tr>
<th>Administration of Treatment</th>
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<tbody>
<tr>
<td>- blue hollowed ball</td>
</tr>
<tr>
<td>- disc swing</td>
</tr>
<tr>
<td>- bolster swing</td>
</tr>
<tr>
<td>- net</td>
</tr>
<tr>
<td>- scooter board</td>
</tr>
<tr>
<td>- ramp</td>
</tr>
<tr>
<td>- bean bags</td>
</tr>
<tr>
<td>- blocks</td>
</tr>
</tbody>
</table>

5. Amount of Verbal Instructions
- a lot
- some
- very little
- none

6. Shorter, simpler sentences
- a lot
- some
- very little
- none

7. Longer, more complex sentences
- a lot
- some
- very little
- none

8. Amount of Verbal Feedback
- a lot
- some
- very little
- none

9. Shorter, simpler sentences
- a lot
- some
- very little
- none

10. Longer, more complex sentences
- a lot
- some
- very little
- none

Figure 2. Example of participants' perceptual-motor plan.

not have access to the results of their observations from session 1 while observing session 2.

The observers were assigned randomly to the observation sessions, conducting them from behind a one-way mirror without the participant's or child's knowledge. The observation room was occupied by only a single observer, except when two observers were required to obtain inter-observer reliability. Observers used a five-point scale to rate participants' degree of consistency in following the intended treatment plan for a particular treatment session. The ratings were: 0 = not at all, 1 = a little, 2 = an average amount, 3 = a lot, and 4 = totally.

Because the rating of consistency for each of the 10 categories of a treatment plan could range from 0 to 4, the sum of the ratings for each performance component could range from 0 to 40. In calculating this sum, ratings for the categories of verbal instructions and feedback were combined with those for the type, sequence, and repetitions of the activities and equipment used because these verbal aspects were very much integrated with all the other elements in the actual treatment delivery. In the interest of maximizing the meaningfulness of the consistency ratings, the sum of the treatment consistency rating scores obtained for each performance component was expressed as a percentage of the highest possible rating score of 40, which represented "complete" consistency. Thus, a score of 30 out of a maximum of 40 indicated 75% consistency in following a treatment plan. All data analyses were based on these percentages for each treatment unless individual treatment consistency rating scores were being directly examined.

An observer recorded notes on the delivery of a treatment throughout a session but did not decide on the final ratings for consistency until the end of the session. This approach was necessary to determine whether all the details of a plan had been completed as they were listed from the beginning to the end of the 1-hour session. It also gave an observer and a participant an opportunity to discuss the reasons for any changes in a treatment plan that may have been made during the course of the ses-
An observer had the benefit of a participant's clinical reasoning about any changes and took this reasoning into consideration in making the final consistency ratings.

For example, a participant's perceptual-motor treatment plan could involve the use of gross coordination activities. If these activities seemed to be carried out during the session and carrying them out for the amount of time that was planned. Alternatively, in attempting to implement the gross coordination activities, the participant might find that during the treatment session, the child is unable to put forth the effort required to complete the activities. To adapt to the child's state, the participant may have several options, including reducing the number of activities, doing the same number of activities but shortening the time spent on each, or moving the activities to another point in the session when the child may be more alert (i.e., earlier rather than later). The observer would discuss one or more of these changes to the intended treatment plan with the participant at the end of the session to gain an appreciation of the participant's clinical reasoning. Reasoning that seemed to reflect an appropriate adaptation given the circumstances may still receive a high consistency rating because the participant was demonstrating consistency in her thinking. On the other hand, an explanation that the participant had forgotten to do the activities or that there was not enough time to do them as intended would receive a lower rating.

A number of procedures were followed in an attempt to maximize both intraobserver and interobserver reliability. Before the start of the study, the observers watched several evaluation and treatment sessions to obtain firsthand knowledge of the test procedures and treatment activities in order to understand how the activities corresponded to the categories of a treatment plan and to practice making their ratings. During the study, intraobserver reliability for the same observer's ratings of the same participant after 1 month and 4 months of treatment was addressed. The two primary observers received continuous practice in applying their observation skills because new children were entering the study on an ongoing basis. This practice promoted reliability in applying observation criteria in general and for the same participant and child from one session to the next. The observers also periodically met with one another and the first author to share and review their decisions about specific examples of their ratings. This ongoing discussion was designed to maintain both the accuracy and continuity in how the observers rated over time.

Interobserver reliability was established for 42 randomly selected treatment sessions (15 sensory integrative, 27 perceptual motor), with the three observers working in pairs. Spearman rank order correlations were rho = .78, p < .01 for sensory integrative techniques and rho = .64, p < .01 for perceptual-motor techniques.

Results

Table 1 summarizes the means of the percentages representing the treatment consistency ratings for each performance component addressed by the two treatment techniques. Because of the differences in the nature of the performance components that were the focus of sensory integrative and perceptual-motor treatment, it was decided that evaluating treatment consistency for all possible comparisons of these individual components would not provide the most representative or meaningful impression of consistency. Instead, several other comparisons were made both between and within treatments to assess factors that may be associated with treatment consistency. The number of ratings involved in the different analyses varied slightly due to some missing ratings. These omissions occurred because three of the observation sessions upon which the particular ratings depended were interrupted, and thus falsified, by other clinical staff members who had inadvertently entered the observation room.

Consistency Between Treatments

Overall between-treatment consistency was determined by obtaining a total of the consistency rating scores for the combination of all the performance components of each treatment. The means of the total treatment consistency rating scores were 86% for the sensory integrative treatment and 79% for the perceptual-motor treatment. A 2 x 3 x 2 analysis of variance (ANOVA), with treatment (sensory integrative, perceptual motor) and participants (1, 2, 3) as between-participant factors and observation sessions (1, 2) as within-participant factors, did not indicate a significant main effect for treatment, F(1, 40) = 3.88, p = .056; participants, F(1, 40) = 2.54, p = .09; observation sessions, F(1, 39) = 1.01, p = .32; or treatment–session interaction, F(1, 39) = 3.31, p = .07. The mean percentages of the total treatment consistency ratings for both observation sessions of each treatment showed a tendency for the consistency to remain much the same for the sensory integrative techniques (87% for session 1, 85% for session 2; see Figure 3). In contrast, treatment consistency started out lower (75%) for the use of perceptual-motor techniques, but at session 2, it was closer (83%) to the level for sensory integrative techniques.

Consistency Within Treatments

Within each treatment, consistency was examined in two
ways. The total treatment consistency rating scores that had been obtained by combining the scores for all the performance components addressed by each treatment were used to determine whether there were differences among participants and observation sessions in overall consistency within each treatment. Further, possible participant and observation session differences were examined for the individual treatment consistency rating scores of each performance component of the two treatments.

Within the sensory integrative treatment, a 3 x 2 ANOVA, with participants (1, 2, 3) as a between-participant factor and observation sessions (1, 2) as a within-participant factor, indicated no significant differences in treatment consistency rating scores for all performance components combined; among participants, $F(2, 20) = .50, p = .61$; between sessions, $F(1, 19) = .07, p = .79$; or for participant–session interactions, $F(2, 19) = .40, p = .67$. A series of 3 x 2 ANOVAs that compared the same factors for the treatment consistency rating scores of each performance component of the sensory integrative treatment indicated a significant difference among participants only for the treatment activities that addressed tactile defensiveness, $F(2, 20) = 4.15, p = .03$.

Within the perceptual-motor treatment, similar 3 x 2 ANOVAs indicated no significant differences in the treatment consistency rating scores for all performance components combined; among participants, $F(2, 20) = 1.33, p = .29$; between sessions, $F(1, 19) = 2.10, p = .16$; or for participant–session interactions, $F(2, 19) = 1.14, p = .34$. There was a significant difference among participants for treatment consistency associated with fine coordination and dexterity, $F(2, 20) = 4.17, p = .03$.

### Discussion

The results indicate greater consistency in following a treatment plan when using sensory integrative techniques than perceptual-motor activities, but the difference was not significant. Although the child as well as the therapist contribute to the direction of sensory integrative treatment, participants were rated as consistent in following their sensory integrative treatment plans as they were in using perceptual-motor activities, which tend to be more scripted, program-centered, and narrowly prescribed in both the plan design and the treatment administration.

These results illustrate the importance of the clinical reasoning process that occupational therapists use to achieve the desired blend of fidelity to basic theoretical principles and flexibility in engaging a child in the therapeutic techniques that reflect these principles. To the extent that the degree of consistency found for the use of sensory integrative techniques appeared to be maintained over time, while allowing for treatment modifications that were deemed justifiable in response to a child's perceived needs, the marriage of art and science in therapy seems attainable.

One explanation for the trend of lesser to greater consistency found for the use of perceptual-motor techniques over time may have to do with the difficulty participants reported in ensuring that the children persisted on some of the activities. For many of the children, but particularly for those who had problems focusing their attention, participants noted that the scripted nature of the perceptual-motor activities made it more difficult to be flexible in finding ways to keep the children interested and on task. Sensory integrative activities involving the use of large equipment could be made more intrinsically rewarding to provide children with age-appropriate challenges. Participants reported that they learned over time how to implement perceptual-motor activities more effectively with some children. It may be that more effective implementation was also associated with the participants gradually learning to design better treatment plans for these children. Further, the children themselves may have become more accustomed over time to the scripted

### Table 1

**Mean Percentages of the Sensory Integrative and Perceptual-Motor Treatment Consistency Rating Scores for Each Performance Component Addressed by the Three Participants in Observation Sessions 1 and 2**

<table>
<thead>
<tr>
<th>Performance Component</th>
<th>Observation Session 1</th>
<th>Observation Session 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P1</td>
<td>P2</td>
</tr>
<tr>
<td>Sensory integrative treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tactile discrimination</td>
<td>85</td>
<td>83</td>
</tr>
<tr>
<td>Tactile defensiveness</td>
<td>82</td>
<td>99</td>
</tr>
<tr>
<td>Vestibular</td>
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<td>89</td>
</tr>
<tr>
<td>Proprioception</td>
<td>88</td>
<td>92</td>
</tr>
<tr>
<td>Perceptual-motor treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine coordination and dexterity</td>
<td>63</td>
<td>73</td>
</tr>
<tr>
<td>Gross coordination</td>
<td>84</td>
<td>76</td>
</tr>
<tr>
<td>Visuomotor integration</td>
<td>75</td>
<td>74</td>
</tr>
</tbody>
</table>

*Note:* P1 = participant 1; P2 = participant 2; P3 = participant 3.

*Significant difference among participants for sessions 1 and 2 combined ($p = .03$).
nature of perceptual-motor activities and were better able to respond to them. In a study comparing the effect of child-initiated versus structured, therapist-prescribed sensorimotor therapy on the performance of children with developmental motor problems, DeGangi, Wietlisbach, Goodin, and Scheiner (1993) similarly found that therapists reported more difficulty in soliciting the cooperation of a child with temperament problems during the structured approach. These investigators concluded that finding a balance between more child-centered and structured approaches is a major challenge of treatment.

The degree to which occupational therapists are consistent in following treatment plans may also be related to their orientation toward using sensory integrative techniques over perceptual-motor techniques. For some participants in the study, or generally speaking, a stronger inclination toward establishing a shared dialogue with a child, which is implicit in the use of sensory integrative techniques, may make the greater structure associated with perceptual-motor activities more difficult to adjust to, although greater consistency can be achieved if desired. The difference found among participants using perceptual-motor techniques may reflect the considerable adjustment required of them in providing this treatment to particular children.

**Limitations**

The results provide indirect evidence of consistency in following treatment plans insofar as they were obtained within the context of a research study. The fact that participants were observed and rated and had to keep the two types of treatment techniques as distinct as possible were both conditions that they would typically not have to contend with in a clinical setting.

The two treatment approaches may not lend themselves to the same level of specificity in planning activities. If, by their nature, sensory integrative techniques involve less specificity, the expectation might be for less consistency in the use of this treatment.

There was no control for differences in the participants' knowledge of the two treatments or their ability to explain themselves in sharing their clinical reasoning, both of which could have been factors that biased the final consistency ratings. How adept the two observers were in engaging the participants in discussions of their clinical reasoning may have affected the ratings, not to mention their ability as psychometrists, as opposed to occupational therapists, to rate consistency on the basis of the accuracy of their observations regarding treatment modifications. The psychometrists' ability to reliably apply the same observational rating criteria over time remains...
unknown, and interobserver reliability was found to be somewhat lower for the perceptual-motor techniques than that obtained for the sensory integrative techniques. Interobserver reliability could have also been biased by the fact that the observations of perceptual-motor activities included a subset of treatment sessions that were not part of the present study. These sessions that were done by therapists other than the participants may have added to the variability of consistency rating scores and may have inflated interobserver reliability.

Significant differences in consistency were found among participants for certain aspects of both treatments. However, the observation of only three participants did not permit a more extensive evaluation of the contribution of different participant characteristics to consistency.

Conclusion

Consistency in following treatment plans seemed generally high, but may have varied because of such factors as the specific nature of the treatment activities and possibly individual therapist characteristics. A treatment plan should be viewed as a guide rather than a prescription for conducting therapy that allows for a therapeutic dialogue between therapist and child. For practical, legal, and ethical purposes, a plan should also form a record of intended therapeutic practices that therapists can use to document their activities and to dialogue among themselves about a child’s progress. Without evaluation of consistency in following a treatment plan in a research study, especially when the treatment tends to be less standardized, a critical factor for demonstrating treatment efficacy may be missing.

Acknowledgments

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