Structured Communicative Play Therapy for Targeting Language in Young Children

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Although recent evidence has shown that conversational contexts may be more effective in achieving spontaneous use of language targets, many clinicians continue to employ more structured and less naturalistic contexts for their therapy. The purpose of the current article is to present a therapy approach that is structured, yet incorporates the communicative aspects of more naturalistic language therapy.

An important focus for language intervention with preschool children is to address deficits in the grammatical system of children with language impairments (LI). The importance of making grammatical skills a focus of therapy is supported by research that shows that grammatical competence is a persistent problem for children with LI (Goffman & Leonard, 2000; Watkins, 1994). In addition, certain pragmatic abilities, such as conversational repair and cohesion, depend on knowledge of grammar (Leonard & Fey, 1991; Mentis, 1994). The long-term aim of language intervention, however, is not only to have these children learn more sophisticated grammatical forms but also to have them use these newly learned aspects of grammar for a variety of purposes. To accomplish this aim, the speech–language pathologist (SLP) must design a variety of learning environments that enable the child to hear and use the relevant language structures. These learning environments may differ in a number of ways, including the number and type of models that the child hears, the degree of naturalness or structure, the number opportunities for the child to produce the target, and the adult's response to the child's correct and incorrect attempts at the target.

Although recent evidence has shown that conversational contexts may be more effective in achieving spontaneous use of language targets (Camarata & Nelson, 1992; Nelson, Camarata, Welsh, Butkovsky, & Camarata, 1996), many clinicians continue to use more structured and less naturalistic contexts for their therapy. This may be because, as reported by Shriberg and Kwiatkowski (1982) for phonological therapy, clinicians perceive drill therapy paradigms as more effective and efficient. Although children do produce trained target forms within the drill therapy context, however, these more structured therapies do not lead to spontaneous productions in conversation (Fey, 1986; Law, 1997) and thus cannot accomplish the ultimate aims of intervention.

THE CONTINUUM OF NATURALNESS

Intervention contexts vary along a continuum of naturalness on the basis of their similarity to everyday situations in which the child has frequent opportunities to communicate (Fey, 1986). At one extreme is drill therapy, in which production of the target is in response to some specific stimulus. At the other extreme are conversational activities in which use of the target behavior arises naturally as it is needed to communicate. Play has been incorporated into therapy at each of these extremes: as a context for naturalistic therapy in free play (Fey, 1986) and as a motivator and reinforcer for correct responses within structured drills (Shriberg & Kwiatkowski, 1982).

Drill

Drill therapy consists of an antecedent stimulus, child response, and consequent reinforcement. The antecedent stimulus serves as the condition for the child's response and may also include instruction, often in the form of a model of the

target form. The child's responses always follow the stimulus and are constrained such that only responses that match or attempt the specific target are allowed. Response by the child is required, and the motivation for the child's response comes from a consequent reinforcer. The child's response is not, therefore, communicative, and the reinforcer is unrelated or external to the target response and activity. Prompting may be provided after incorrect attempts, and feedback is provided regarding response accuracy. Stremel and Waryas (1974) described a drill therapy program using a token reinforcer paired with social praise (e.g., "very good"). Play can be used as an alternative reinforcer. In this modification of drill therapy, the child gets to take a turn in a game or participate in a play event following correct responses (Shriberg & Kwiatkowski, 1982). The game or play event is unrelated to the target form.

Drill Play

Shriberg and Kwiatkowski (1982) described an alternative form of drill that they call *drill play*. In this therapy paradigm, play is used both as a motivational event prior to the child's response and as a consequent reinforcer. It is important to recognize that, in all other aspects, drill play is like other drill therapies. This therapy paradigm still involves a stimulus and a required, constrained, and noncommunicative response, as well as prompting and feedback about accuracy. The child's response is motivated and reinforced solely by the opportunity to participate in play events that are unrelated to the target response. The difference is that these drill elements are embedded within a play context.

Structured Play

Shriberg and Kwiatkowski (1982) described a further modification of drill therapy, which they call *structured play*, in which play is used only for motivation to encourage the child to make attempts at the desired response. In this therapy paradigm, the reinforcer is not contingent on correct responses. Instead, the child gets to participate in the play event regardless of the correctness of the response. An additional difference from drill play is that prompting a second attempt after incorrect responses is only provided if the child is receptive to this. Initial responding by the child (i.e., making a first attempt), however, is still required and constrained by the preceding stimulus, and feedback is provided about response accuracy. The child's response is still noncommunicative and is motivated by the opportunity to participate in the play event.

Quasi-Naturalistic Play

Several therapy approaches involve the application of behavioral principles within naturalistic play situations. Common characteristics of these approaches are that the environment is set up to encourage the child to talk and that the adult follows the child's attentional focus (Dvortcsak, Ingersoll, & Buckendorf, 2003). Examples of this naturalistic behavioral play approach include incidental teaching (Hart & Risley, 1975) and the mand-model procedure (Rogers-Warren & Warren, 1980). These two approaches differ in the timing of prompts: whether prompts are given after the child's communicative attempt (child-initiated interactions) or to elicit such attempts (teacher-initiated interactions). In incidental teaching, prompts to assist the child in producing the target response are given only after child-initiated interactions. In the mand-model procedure, prompts are given to elicit communicative interactions from the child and to steer the child to produce attempts at specific language targets. The child's correct responses are followed by both natural consequences that relate to the child's communicative attempt, such as attention or access to materials, and by explicit feedback about response accuracy (e.g., "good talking").

Free Play

In free play, the child talks or acts in response to what is happening, but the specific opportunities for responding are not determined by the adult. The child's response is nonconstrained—the child can choose what to say or do—and occurs as a natural component of the play activity. The child's motivation to talk is, therefore, communicative. Fey (1986) refers to this as *child-centered play*. The hallmark of this therapy approach is that the adult follows the child's utterance with an expansion (i.e., an utterance that adds grammatical or informational elements to the child's utterance) and provides natural consequences for successful communications without giving any feedback about accuracy. As in quasi-naturalistic play, environmental arrangements may be made to lead the child to produce attempts at specific targets, but no prompts are given if the child does not produce target-relevant utterances or does not talk at all. Therapy within naturalistic play contexts is described by Cleave and Fey (1997).

Difficulties in using play as the therapeutic context have been noted by various authors and researchers. In both free play and quasi-naturalistic play, the child may make few attempts at the specific language structures being targeted. This limits the opportunities for providing expansions and natural reinforcers. Connell (1987a) suggested that children with LI may have difficulty extracting the relevant aspects of language input and that they may, therefore, need a different type of input. He pointed out that naturalistic play therapy might only provide more of the same input that they had already been getting. Fey (1986) also noted that, in the guise of more naturalistic therapy, some intervention "provides little more than what the child would ordinarily get in the natural environment" (p. 65). Because of this, naturalistic play may be better for general language stimulation and for promoting conversational participation than for working on specific targets (Paul, 2001).

More structured therapy approaches—including drill play and structured play—may provide the extra support that chil-

dren with LI need. These approaches provide opportunities to give the child a large number of models and to elicit a large number of attempts at specific linguistic targets. There is evidence that these therapies are effective in getting the child to produce new linguistic forms (Connell & Stone, 1992). The problem, however, is that these newly trained forms may not generalize to conversational speech or be effective outside the therapy room. When generalization is taken into account, the more naturalistic conversational therapies have been shown to result in more rapid acquisition and more frequent spontaneous usage of target structures (Camarata & Nelson, 1992; Nelson et al., 1996).

We are faced with an apparent paradox. Evidence suggests that the more naturalistic therapy approaches are more effective in achieving the long-term goal of spontaneous use of newly learned aspects of grammar for a variety of purposes. However, clinicians as well as parents may have difficulty in implementing effective naturalistic therapy (i.e., in a way that provides a sufficient density of models). As Fey (1986) stated, naturalistic therapies are better only "if they have the desired effect of getting the child to produce higher level communicative behaviors than was characteristic of her performance prior to intervention" (p. 65). The purpose of the current article is to present a structured approach that incorporates the communicative aspects of more naturalistic language therapy and, therefore, results in generalization of language targets to conversational speech.

STRUCTURED COMMUNICATIVE PLAY

Underlying Principles

The view taken here about language development for children with LI, as well as for typically developing (TD) children, is that it is a process of learning how different linguistic forms are used to express meaning. To do this, the child needs to hear models within situations that link form and meaning. The link must be provided within the situational context early on. As the child gradually learns language, however, the form–meaning link can be provided through the language itself. New forms may initially emerge in a limited way (what Tomasello [1992] referred to as "islands") and then become productive with more varied vocabulary. New forms may first emerge within routine or stereotypic contexts (what Nelson & Gruendel [1979] called "scripts") and then generalize to less familiar, varied contexts. Learning of any form is, therefore, gradual and progresses through the stages of emergence, productivity, and eventual mastery.

Children with LI may require some modifications for language learning. Not only the number of models (Leonard, 1998) but also the density and salience of models may need to be increased (Johnston, 1985; Nelson, Welsh, Camarata, Butkovsky, & Camarata, 1995). Children with LI may require opportunities for production to attempt and practice new forms, as well as opportunities for hearing those forms (Connell, 1987b; Leonard). Furthermore, models and production attempts may need to be connected; that is, opportunities to hear models may need to occur following the child's productions (what Nelson et al. [1996] called "recasts") so that the child can hear the difference between his or her own form and the adult's form. Moreover, language intervention may need to incorporate structured activities to target specific linguistic forms (Johnston, 1985; Paul, 2001). In keeping with this view of language development and intervention, structured communicative play (SCP) adopts five guidelines for making clinician-directed therapy more natural (see Figure 1).

The SCP Procedure

In SCP, an activity is set up to provide a context for the therapy interaction. The adult provides models of the target throughout the activity and provides opportunities for the child to produce that specific linguistic form. These opportunities differ in two ways from the stimulus in drill therapies. First, in drill the eliciting stimuli must be controlled so that the child's responses become conditioned to that particular stimulus, whereas in SCP the behaviors and speech used to elicit responses are more variable. Second, in SCP the child's response is optional rather than required. If the child does respond, the adult follows with expansions or other consequating strategies. The adult also provides natural consequences in response to the child's communicative intent. If the child does not respond, the adult can respond for the child and thereby provide an additional model of the target. No feedback is provided about response accuracy. Instead, the child experiences the natural consequences of communicative success or failure.

The Appendix illustrates the difference between drill (D), drill play (DP), structured play (SP), and SCP using the same context for the goal of producing a response using *article + noun*. The difference between D and DP is that in DP the activity includes a play aspect for motivation before the child's response. The activity is further modified in SP to make it more playlike. Both identification of the target and prompt-

1. Syntax and morphology must be mapped to meaning.
2. Children need to hear lots of models of form–meaning mappings.
3. Working on production helps children become better communicators.
4. The focus of therapy should be on communicative interaction and participation.
5. Therapy contexts must be inherently motivating.

FIGURE 1. Principles of Structured Communicative Play (SCP).

ing are eliminated. Reinforcement is contingent on production attempts rather than on correct productions. For SCP, the same context is set up, but the activity is modified to create opportunities for the child to make communicative responses, although responding is optional. The activity is inherently motivating, so the external reinforcement contingency used in SP for production attempts can be eliminated. In addition, the clinician's responses are contingent on the child's communicative attempts. If the child does not respond, the clinician continues the activity and provides more models. Following incorrect productions of the target form, the clinician provides expansions but does not make explicit comments about accuracy.

Illustration of SCP Use With One Child

As an example, LH was first evaluated at the William Paterson University Speech and Hearing Center in July 1998 at age 36 months. His performance at that time was consistent with specific language impairment; that is, with language as the primary deficit "in the face of otherwise typical development" (Schuele & Hadley, 1999, p. 13), including cognition. His language impairment was rated as moderate-to-severe expressive language impairment and included a moderate phonological impairment. He scored in the first percentile on the *Preschool Language Scale–3* (Zimmerman, Steiner, & Pond, 1992), 2.5 standard deviations below the mean for his age. Mean length of utterance (MLU) was not determined because he produced fewer than 100 utterances. A look at his utterance distribution, however, showed a predominance of single-word utterances with few word combinations. A drill play approach was used to target word combinations and phonological goals. Posttherapy, an increase in usage of word combinations was reported; however, the clinician also reported a low response rate and characterized LH as "oppositional."

In February 1999, at 3 years 7 months, LH was reevaluated by a new clinician under the supervision of the author. A 100-utterance language sample was obtained during an interaction with his mother, and it was analyzed using the Index of Productive Syntax (IPSyn; Scarborough, 1990). LH scored more than 3 standard deviations below the mean on the IPSyn. He scored between 1.5 and 2.0 standard deviations below the mean on the Noun Phrase and Sentence Structure subscales and scored more than 2.5 standard deviations below the mean on the Verb Phrase and Question/Negation subscales. LH also scored in the 10th percentile on the *Goldman-Fristoe Test of Articulation* (Goldman & Fristoe, 1986).

In light of LH's IPSyn scores, the clinician selected one goal from each of the two lowest subscales: A goal for negative sentence forms with early negative modals (*can't*, *don't*, *won't*) was selected from the Question/Negation subscale, and a goal for the present progressive verb form (auxiliary *be* with a verb in *–ing* form) was selected from the Verb Phrase subscale. Both forms showed 0% usage at baseline. LH produced *not* instead of the negative modal (e.g., "I not do that") and produced the progressive verb form without the auxiliary (e.g., "I pushing the car"). These grammatical goals were targeted for approximately 25 minutes out of a 50-minute session, with the remaining time spent on phonological goals.

The clinician initially attempted to use a child-centered therapy approach involving free play and following Van Riper's (1968) suggestions for getting a young child to talk. LH, however, turned his back on the clinician and engaged in solo play. LH did talk during play, mostly to himself or addressing the toys with which he was playing; he also gave directives to the clinician to get objects or to stop her actions, but he did not respond to the clinician's utterances or attentional bids. He thus demonstrated the profile of a verbal noncommunicator—a child who is verbally active but nonresponsive to the communication partner (Fey, 1986).

After several such sessions, the clinician introduced SCP activities. It was hypothesized that a more structured activity with specific "built in" participation opportunities might serve as a scaffold for LH to participate in a meaningful interaction and provide opportunities for presenting models of the targets. The clinician used pausing to signal participation opportunities and then completed LH's turn when he did not respond. LH joined in each of the SCP activities within the first session in which that activity was introduced. Two SCP activities were used for the negative modals. One activity, involving a matching game, targeted *don't* and *can't* in comments and acknowledgments (expressing both agreement and disagreement) and in directives. A second activity, involving puzzle building, targeted *won't*. A food-shopping activity was used for first and second person singular auxiliary forms, *am* and *are*. The auxiliaries were targeted in comments, in requests for information and confirmation, in providing solicited information, and in acknowledgment.

Each goal's use was monitored using frequency counts. By the end of the semester, LH was interacting with the clinician during free play as well as during the SCP activities. Generalization to the free play context was used in measuring outcome. Cumulative usage was determined for up to 10 productions during a 10-minute free play period at the end of the last two sessions. LH's mother also rated his use in conversation at home on a 3-point scale: consistent, inconsistent, or rare.

Over two free play periods, LH reached a cumulative usage of 10 productions of *don't* and *won't* and seven productions of *can't*. LH's mother rated his usage of negative modals as consistent in conversation at home. LH reached a cumulative usage of 10 combined productions for both auxiliaries over the two play periods. Most of his productions were of *am* because he rarely commented on the clinician's actions. LH's mother reported his use of these auxiliaries in conversation at home as inconsistent.

DISCUSSION

This article describes a hybrid therapy approach, SCP, that incorporates a number of principles for increasing naturalness

(Fey, 1986; Fey, Long, & Finestack, 2003). In SCP, activities can be developed to elicit specific language targets that might not occur or that might occur infrequently during free play. SCP presents those language targets within a meaningful context in which the target is needed by both the adult and the child for communication. Grammatical forms can be targeted for a variety of communicative functions, both assertive and responsive, rather than being produced solely in response to an adult's production requests. SCP activities also provide the child with frequent opportunities to attempt the target, as Connell and Stone (1992) recommended. Furthermore, SCP activities provide a means for focused stimulation so that the child hears a high density of models of the target form, as recommended by Connell (1987a) and Leonard (1998). For children who need additional scaffolding for correct production, SCP activities can be set up with opportunities for meaningful imitations, in which the child partly or completely replicates an adult's utterance for some communicative purpose rather than because the child has been told to do so.

In planning intervention, one would ideally try to match intervention strategies to the needs of particular clients. There is very little evidence, however, to support a particular approach for making this match. Friedman and Friedman (1980) suggested that IQ may be a significant variable in selecting treatment approaches. In their study, children with lower IQs made more progress in an operant approach involving drill, whereas children with higher IQs made more progress with a more interactive, although still highly structured, therapy approach. From this finding, SCP would appear to be a good choice for children like LH whose cognition is within the typical range. Cole and Dale (1986), however, found no effect of IQ on treatment efficacy.

Fey (1986) suggested that conversational participation style is an important factor to consider in selecting therapy approaches. According to Fey, for children who are passive communicators (i.e., who are responsive but not assertive in conversational interactions), clinician-directed approaches should not be used, because they would reinforce the child's responsive communication style. A clinician can plan SCP activities, however, to model assertive communication and provide production opportunities for both assertive and responsive communication acts.

For LH, the clinician introduced SCP activities to scaffold responsive conversational participation and to provide opportunities for assertive acts other than directives. These structured activities proved to be engaging for LH, a child who had not been interactive in more naturalistic play, and resulted in achievement of the targeted forms in and out of therapy. An additional and unanticipated outcome was the mother's reaction to the SCP activities. LH's mother initially demonstrated a pattern of nonresponsiveness (Yoder & Warren, 1998) and had not increased her use of expansions during parent training. In naturalistic play activities, she solicited responses from LH and commented on what he was doing but did not really become a participant. During the therapy period reported here, she was included in the SCP activities and was coached to respond to LH with expansions. She quickly learned to use consequent expansions during the structured SCP activities and, subsequently, generalized usage to less structured play, although expansions during free play continued to be infrequent. She enjoyed the SCP activities, becoming an active and responsive participant and asking for more activities to do at home. She reported playing with LH more at home and also reported using expansions with LH at home. In addition, she asked whether these activities and strategies would benefit LH's younger sister, who, at 1 year 6 months, talked little and evidenced signs of also having a language impairment. This mirrored the behavior of the student clinician, who produced more expansions and reported finding it easier to learn to use expansions during SCP activities than during free play.

The children with whom SCP has been used have achieved their treatment targets, producing the targeted language forms within the SCP activities and generalizing them to conversational speech. SCP has been applied to a variety of grammatical goals, including bound and free grammatical morphemes, verb forms, prepositional phrases, negative and question sentence forms, and complex sentences. In LH's case, SCP was also useful for targeting pragmatic functions, particularly responsive conversational acts. Student clinicians and parents report that it is easier to learn to provide expansions and natural reinforcers during the more structured SCP activities than during less structured play. At present, however, the efficacy of SCP has been demonstrated only by clinical outcomes. Efficacy studies are needed to document treatment effectiveness for SCP and to look at its productiveness relative to other therapy approaches and with different types of clients. Studies also are needed to document the effectiveness of SCP in parent and clinician training.

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APPENDIX: COMPARISON OF DRILL (D), DRILL PLAY (PD), STRUCTURED PLAY (SP), AND STRUCTURED COMMUNICATIVE PLAY (SCP)

Drill With Play Reinforcement (D)

Activity: Object labeling

Context: The clinician shows the child a bag with toy animals.

Instructions: "I have some animals in my bag. I'm going to take each one out, one at a time, and we'll say what it is. I'll say it first. Remember to say *a* before you say the animal's name. Every time you say *a*, you get to put the animal into the zoo. When we have 10 animals in the zoo, you'll get to play with the animals."

Stimulus: The clinician takes out an animal and says, "This is a bear. What is it?"

Correct response: "a bear"

Consequence: "Very good. You said *a*. You get to put the bear into the zoo."

Incorrect response: "bear"

Consequence: "I didn't hear *a*. Try it again. Say 'a bear.'" After the child's response, the clinician gives feedback about accuracy, puts the bear back in the bag, and says, "Let's try another one."

Consequence after 10 correct productions: The child gets to play with the animals for 1 minute.

Drill Play (DP)

Modification: *Change the activity so that there is a play aspect for motivation before the child's response.*

Activity: Object labeling

Context: The clinician shows the child a bag with toy animals.

Instructions: "I have some animals in my bag. You can take out one at a time, and then we'll say what it is. I'll say it first. Remember to say *a* before you say what the animal is. Every time you say *a*, you get to put the animal into the zoo. When we have 10 animals in the zoo, you'll get to play with the animals."

Stimulus: The child takes out an animal and the clinician says, "That is a bear. What is it?"

Correct response: "a bear"

Consequence: "Very good. You said *a*. You get to put the bear into the zoo."

Incorrect response: "bear"

Consequence: "I didn't hear *a*. Try it again. Say 'a bear.'" After the child's response, the clinician gives feedback about accuracy, puts the bear back in the bag, and says, "Let's try another one."

Consequence after 10 correct productions: The child gets to play with the animals for 1 minute.

Structured Play (SP)

Modification: *Modify the activity to make it more playlike; make reinforcement contingent on production attempts; eliminate identification of the target and prompting.*

Activity: Object labeling

Context: The clinician shows the child a bag with toy animals.

Instructions: "I have some animals in my bag. Pick one out and let's see what it is."

Stimulus: The child takes out an animal and the clinician says, "Look what you have." The clinician waits a moment for the child to label the animal. If the child makes no response, the clinician says, "It's a bear."

Correct response: "(it's) a bear"

Consequence: "Very good. You said *a*. Put the bear into the zoo."

Incorrect response: "bear"

Consequence: "I didn't hear *a*. It's *a* bear" (said with *a* emphasized). "Put the bear into the zoo and pick out another one."

Consequence after 10 correct productions: The child gets to play with the animals for 1 minute.

Structured Communicative Play (SCP)

Modification: *Modify the activity to make the response communicative; eliminate the external reinforcement contingency and respond to the child's communicative attempts; make the response optional and continue the activity and provide a model if the child does not produce the target; eliminate accuracy feedback and provide expansions after incorrect productions.*

Activity: Guessing game

Context: The clinician shows the child a bag with toy animals.

Instructions: "We're going to play a guessing game. I have some zoo animals in my bag. Feel around for one of the animals and see if you can guess what it is."

Stimulus: The child feels around for an animal in the bag and takes hold of one. The clinician may prompt a verbal response by saying, for example, "Did you find one?" or "What did you find?" or "Is it a bear?"

Correct response: "(it's) a bear"

Natural consequence: The clinician might say, "Let me see." Child takes out the animal. If the child guessed the right animal, the clinician might say, "It is a bear!" If the child guessed the wrong animal, the clinician might say, "Oh! It's not a bear. It's a lion."

Incorrect response: "(it's) bear"

Natural consequence: The clinician might say, "A bear? Is it a bear? Let me see." Continue with the next animal.

No response: The clinician might guess, "Is it a bear?" If the child says, "yes," the activity continues with the next animal as for a correct response. If the child says, "no," then the clinician could guess another animal.