Cognitive Control Therapy with Children and Adolescents

General Procedure in Cognitive Control Therapy

Sebastiano Santostefano

General Procedure in Cognitive Control Therapy

Sebastiano Santostefano

e-Book 2015 International Psychotherapy Institute

from *Cognitive Control Therapy with Children and Adolescents* Sebastiano Santostefano

Created in the United States of America

Table of Contents

General Procedure in Cognitive Control Therapy

The general procedures discussed here apply to each of the programs detailed in the next chapters and with these techniques, and concepts considered, define the practice of CCT.

STEPS IN CCT

The goals of CCT are to promote the efficiency with which cognitive controls (a) copy and coordinate information in reality and fantasy, (b) participate in the process of symbolic functioning, and (c) participate in evaluating and assimilating actions taken and in modifying maladaptive responses and pathological metaphors. To achieve these goals two broad steps are followed. First, treatment programs are conducted in a directed format (outlined in Chapters 5-9) to restructure dysfunctional cognitive controls so that they become more efficient when dealing with information as it is and as construed in symbolic functioning and pretending. When cognitive controls become efficient tools, treatment then shifts to a non-directed format (outlined in Chapter 10) in which pathological metaphors are articulated and reformed.

The programs designed to treat the five cognitive controls are listed in Table 4.1. The tasks and techniques unique to each of these programs are detailed in the next chapters. To facilitate discussing general procedure, only

a sketch is presented here. Following the theory and rationale presented previously, the tasks of the five programs form a hierarchy of complexity and of the level of cognitive-developmental maturity required by them. The tasks used to treat body ego-tempo regulation (the programs, *Who Is Me? Where Is Me?* and *Moving Fast and Slow)* are the least complex and require the child to use the earliest cognitive control (experiencing and defining the body in static and dynamic positions and in motion). For example, the child is asked to stand on one leg, or to walk over a pathway, or to move her hand toward and through an imagined cloud of smoke, and to define the body sensations experienced and express associated fantasies. The tasks used to treat the focal attention control (the programs *Follow Me* and *Which Is Big? Which Is Small?)* require the child initially to track various moving targets with her body, later only with visual attention, and still later to actively survey and scan displays of information while remaining seated.

Table 4.1. Cognitive Therapy Programs Prescribed for Each Level of the Hierarchy of Cognitive Controls

DEVELOPMENTAL LEVELS OF COGNITIVE CONTROL FUNCTIONING	COGNITIVE THERAPY PROGRAMS
5. *Equivalence Range*	5. *Where Does It Belong?* Categorizing information that is near/present and far/absent, into conceptual groups: from narrow physical and functional realms to broad conceptual realms.
4. *Leveling-Sharpening*	4. *Remember Me.* Constructing images of information in memory: from simple, global information to complex, differentiated information.
3. *Field Articulation*	3. *Find the Shapes.* Deploying attention selectively: from narrow fields of information containing little irrelevant information to broad fields with many distractions and much irrelevant information.
2. *Focal Attention*	2b. *Which Is Big? Which Is Small?* Tracking information actively: from narrow to broad scanning in macrospace and microspace. 2a. *Follow Me.* Tracking information passively: from narrow to broad scanning in macrospace and microspace.
1. *Body Ego-Tempo Regulation*	1b. *Moving Fast and Slow.* Regulating motor tempos: from those involving body through space to those involving objects across a table to those involving a pencil across paper. 1a. *Who Is Me? Where Is Me?* Building cognitive schemata: from those involving the total body to those involving small parts of the body.

Note. From *A Biodevelopmental Approach to Clinical Child Psychology: Cognitive Controls and Cognitive Control Therapy* (p. 487) by Sebastiano Santostefano, New York: Wiley Publishing Co. Copyright © 1978 by Wiley Publishing Co. Reprinted by permission.

The tasks used to treat field articulation require the child to sit still, actively scan, and sustain attention on stimuli that have been defined as relevant while ignoring existing stimuli that have been defined as irrelevant. For example, the child surveys a matrix of 25 cut-outs of varied colors, shapes, and sizes and searches for and retrieves only the medium blue triangles. Similarly the child searches for and retrieves only circular yellow paperclips from a display of 40 paperclips, varying in shape, size, and color. The tasks used to treat the leveling-sharpening cognitive control are even more complex and require a still higher level of cognitive-developmental maturity. For example, the child is asked to study and remember patterns of geometric cutouts, or paper clips, or squares of sandpaper, varying in color, texture, and shape and then to reexamine the display sometime later and determine whether or not a change in the pattern has occurred. The tasks used to treat equivalence range functioning *(Where Does It Belong*?) are the most complex and require the child to employ the developmentally most advanced cognitive control (categorizing and conceptualizing information). For example, the child identifies and lists the physical attributes and uses of a decorated porcelain vase, and then locates other objects in the room which contain one or more of the attributes and uses identified. Next the child forms groups of these objects, and conceptualizes how the objects of each group belong together.

In addition to the developmental progression represented by the five

treatment programs, the tasks within each program, form a graded series of seven main steps. With each step the child is required to use the particular control mechanism being treated, but with each step the task stimuli and requirements vary as follows: Step 1—-static information is copied and produced; Step 2—moving (dynamic) and/or ambiguous information is copied and produced; Step 3—information is anticipated and managed while the child assumes different points of view; Step 4—information is managed while it is embedded in stimuli which arouse fantasies and emotions; Step 5—the information presented is construed by the child as something other than what it is; Step 6—information and tasks are managed by the child while the child enacts a fantasy directed by the therapist; Step 7—information and tasks are managed within a fantasy directed by the child and enacted by the child and therapist.

Diagnostic Data to Prescribe Therapy

To prescribe a program of CCT, the first task is to diagnose which cognitive control is dysfunctional and which subtype of pathological cognitive orientation is handicapping the child. The presenting problem, history, free play interview, and intellectual and projective tests aid in this diagnosis. Evaluations conducted by the author and colleagues have also relied on tests developed to evaluate each cognitive control (Santostefano, 1978). Multiple types of data are needed because we have observed repeatedly that different

cognitive control deficits underlie similar clinical symptoms, and, conversely, the same deficits underlie different symptoms. Therefore, the presenting symptom alone may not be sufficient to select one of the cognitive therapy programs.

Because of space limitations, and because the reader may not have access to tests of cognitive controls, highlights are presented here of data that could be obtained from history, intellectual and projective tests, and CCT tasks employed as diagnostic instruments in the first sessions of therapy.

Diagnostic Data from History. Discussions in Chapters 2 and 3 make clear why a history of the first three years of the child's life is invaluable. The therapist should focus questions for parents on possible mismatches between the child's unique make-up and unusual/usual environments, and on whether these mismatches interfered with the child's achieving, by the age of 4 years, the cognitive capacities outlined.

The following questions are offered as illustrations: Was the child hospitalized, moved to some very different environment, or exposed to a marked change in caretaking style for an extended period of time (e.g., an aunt with a low-keyed, depressive style cared for the child from 18 to 24 months because mother was undergoing surgery and recovery)? Did the child show behaviors suggesting failure to develop an awareness of standards and

whether and how her actions met them (e.g., the child regularly showed no reaction to behaviors such as tipping over a large container of juice while reaching for a spoon)? Did the child show that attentional activity was beginning to take a deviant course (e.g., at 24 months a child sustained attention for 30 minutes while lining up identical pieces of Legos, but regularly closed her eyes when held before fish tanks at the aquarium; at 18 months a child frequently blinked her eyes and turned away from garments of bright colors worn by her or others)? Did the child show difficulty substituting one object for another and become excessively stressed if a particular plastic figure could not be found? Did the child tend not to pretend when using toys and materials; or did he use them in ways that suggested attributes of the toys were totally lost (e.g., beginning at age two, a child regularly "played" by stacking and lining up various materials, sometimes constructing patterns but rarely pretending; another child used materials, such as a spoon, almost exclusively in highly personal ways, for example, as a car, piece of BM, candy)?

When focusing on the first three years of life, parents of children with severe learning and adjustment problems frequently report two types of behavior that appear to be diagnostic markers of early cognitive pathology. With one type the parents report that the child showed unusual interest and skill with some circumscribed domain of information. One child, for example, could identify a wide range of foreign and domestic cars by the shapes of the

grill and another by the hubcaps. Another child, by the age of 4, had developed the ability to name the day of the week on which each member of the family and relatives had been born. Parents view these behaviors as suggesting high intelligence and accordingly express confusion as to why their child now has difficulty learning. Such early competence, which the author refers to as the "hubcap phenomena," represents the child's attempts to reduce the external world to some circumscribed, manageable level of complexity and to avoid experimenting with information. Later these children typically develop excessive inner or outer orientations, frequently tuned out or occupied with external, trivial details.

The second type concerns isolated but repeated acts of physical aggression that occur between the second and third birthdays and exceed what common sense would view as appropriate. One child twisted off the heads of animal figures and rubber dolls, pushed his 20-month-old sister down a flight of stairs, and dropped many items into the toilet bowl. Another child gave the household cat "haircuts" on several occasions, cutting its hair, an ear, the tail, and skin. While these children display no other particularly unusual behaviors at this time, during these aggressive moments they show indifference, lack of appreciation for the things or person aggressed against and the outcome of their actions. Some parents view such behavior as "peculiar" but sustain the belief that "he is getting his feelings out," others become stressed and punish the child severely. Whatever their response,

parents are usually struck by the child's indifference. These behaviors are understood as reflecting failure in a combination of developmental issues which implicate cognitive functioning: the awareness of standards and whether one's actions meet them; the capacity to pretend; and the beginning of pathological cognitive autonomy where the boundary between reality and fantasy abruptly collapses resulting in behaviors totally prescribed by fantasies.

Diagnostic Data from Psychological Tests. For our purposes, data from traditional tests are useful to aid in diagnosing whether or not a child is handicapped by a pathological orientation. In general, compare a child's efficiency and level of anxiety/stress when dealing with items that are structured and "external" (i.e., do not require imaging and fantasy, such as Wechsler tests; copying geometric designs) versus items that are unstructured and "internal" (require imaging and fantasy, such as Rorschach; telling stories to pictures). Extreme differences in performance signal a pathological cognitive orientation.

The child *handicapped* by a *pathological outer orientation* generally performs better with tasks that fit this orientation and shows a profile of differences illustrated by the following:

1. When dealing with the requirements of structured procedures,

a. efficiency of performance relatively adequate, sometimes exceptional (e.g., drawings of geometric designs are nearly photocopies of the standards; high ability to repeat digits forward and backward);

b. little or no anxiety/stress, effects of pleasure and industriousness while performing, conveys she is "really in to " the tasks;

c. affiliated and related to the examiner as a person;

d. quick reaction times and responses developed with little hesitation.

2. When dealing with the requirements of projective tests,

a. efficiency of performance relatively inadequate, for example, with the Rorschach, difficulty in producing images; constructing images which, though suggesting some dynamic content, are global in organization in terms of developmental expectations (e.g., "creature," "butterfly," "bat," "bunch of colorful flowers," "clouds," "explosion"); with picture tests, stories are constricted and brief and essentially descriptions of the picture;

b. much anxiety/stress; effects of "boring," "This is hard," easily fatigued or sleepy while performing;

c. withdrawn from the relationship with the examiner (e.g., slumps in chair, little eye contact);

d. long reaction times and many hesitations while responding, or quick responses to escape the task; quick to say, "No," "I don't know" in response to inquiries.

The child handicapped by a *pathological inner orientation* generally performs better with tasks that fit this orientation and shows a profile of differences illustrated by the following:

1. When dealing with the requirements of structured procedures,

a. efficiency of performance relatively inadequate; for example, lower Wechsler I.Q.'s than would be expected from child's behavior and history; low performance with tasks presenting discrete, external information (e.g., repeating digits forward and backward, answering questions to the Information Subtest); when copying designs the child may embellish and animate the design or spontaneously share a fantasy (e.g., while copying a Bender Design A, "These are two space ships crashing in space.");

b. much anxiety/stress; effects of "boring," "This is hard," easily fatigued or sleepy while performing;

c. withdrawn from the relationship with the examiner (e.g., slumps in chair, little or no eye contact, slips into thought);

d. long reaction times; many hesitations while responding; very quick responses with little interest in remaining engaged with the task; quickly responds to requests for elaborations with, "No," "I don't know," "That's all."

2. When dealing with the requirements of projective tests,

a. efficiency of responses relatively adequate; for example, with the Rorschach, readily constructs differentiated images (e.g., "two people jumping up and down, beating on drums," "a man on a motorcycle, his hair blowing back; he's waving to somebody."); with picture tests readily constructs long narratives; however, responses are sometimes excessive; with Rorschach, images take excessive liberties with the stimulus (e.g., to Card I, "This is a person in the middle with his arms up, the king is on this side saying to him, 'Climb up,' the queen is on this side saying, 'don't climb up'; all the people are cheering and wondering what will he do; the wind is blowing smoke all around them."); similarly, the picture test stories constructed sometimes quickly leave the stimulus and introduce persons and/or animals and events that have no referent in the picture, resulting in an elaborate, highly fanciful tale;

b. little or no anxiety/stress; effects of pleasure and excitement while performing; conveys she is "really involved" with the task;

c. affiliated and related to the examiner as a person,

d. quick reaction times, responses developed with little hesitation.

The child handicapped by pathological *shifts in orientation* shows both

highly efficient and very inefficient moments of performance with both structured and projective tests, showing a profile illustrated by the following:

3. When dealing with the requirements of both structured and projective procedures,

    a. characteristically shifts from the cognitive orientation required by the task at hand to the opposite orientation (e.g., while copying a geometric design, the child abruptly stops, begins discussing a TV movie about "a guy like Darth Vader who could turn people into puddles of water," or while responding to a Rorschach inkblot, the child abruptly stops and asks the examiner, "Did you make these pictures on the wall?" or, referring to a pen set on the examiners desk, "Did someone give you that for a present?"); other forms of such shifts are also observed (e.g., a child periodically interrupts constructing images to inkblots or telling stories to pictures in order to reposition carefully a tissue box on the table; another child interrupts the same processes to rub carefully his index finger over pencil marks on the table for many seconds; a child produces two relatively elaborate differentiated images to a Rorschach inkblot and then abruptly shifts and focuses on a tiny detail construed in global, concrete terms— "This is like a tiny bump," "These are tiny specks of something."); similarly, the child interrupts an elaborate story to a picture and becomes occupied with a concrete detail in the picture (e.g., "Does this guy have buttons on his shirt? Yeah. No, I can't tell.");

b. much anxiety/stress with both types; rapid shifts in affect while performing, from moments of pleasure and excitement to moments of boredom, fatigue/sleepiness, and complaints that the task "is hard";

c. frequent shifts in the quality of the relationship with the examiner; from moments of being allied and engaging to moments of being in opposition to the examiner and avoiding the relationship (e.g., refuses a task, stares out the window for several minutes);

d. shifts in reaction time and the ease with which responses are delivered (e.g., with the Block Design Test, a child quickly begins constructing an easy design, completes one half of it, then hesitates and shows confusion while attempting to complete it; with the Rorschach, very quick reaction times to some cards and long delays to others).

Diagnostic Data from the First Treatment Sessions. The first three or four sessions can be used diagnostically to clarify which therapy program and steps within it should be prescribed for a child. As discussed above since cognitive controls, and the programs designed to treat them, represent a hierarchy of cognitive activity, from less to more complex and differentiated, the therapist can easily experiment to select an appropriate program. Similarly, the graded steps and tasks that make up each program lend themselves nicely to this purpose.

Initially, a treatment program is selected and administered that fits the child's developmental competence. Then, depending upon the child's response, the treatment shifts to a program that requires more or less complex cognitive activity. For example, assume a therapist, using her "best guess" introduces treatment in field articulation (Chapter 7), presents a relatively simple display of eight cutouts of two shapes and two colors, and asks the child to search for and retrieve only red circles. The child glances at the therapist, yawns, walks away and begins manipulating material on the shelf. The therapist encourages the child to return to the table and repeats the instructions. Now the child asks for a drink of water. Because of the child's behavior, the therapist shifts to the developmentally lower, focal attention program.

Our next illustration considers diagnostic experimentation by shifting tasks from one set within a program to another step in that same program. The therapist selects the field articulation program as suitable, and again using her "best guess," presents a task from Step 1, consisting of a display of 24 geometric cutouts of multiple shapes, colors, and sizes, and asks the child to retrieve all the small, blue diamonds. The child performs the task efficiently and with no signs of stress. The therapist moves to Step 4, presents an array of cutouts now surrounded by pictures which arouse fantasies/emotions (e.g., a baby nursing on a bottle, a child eating an ice cream sundae) and asks the child to retrieve all of the medium, green triangles. The child picks up two

cutouts, stops, fidgets, looks away, continues picking up a large, green triangle (an error), looks away, etc. The child's behavior now makes clear that the field articulation function is not operating as efficiently as when there were no pictures surrounding the display. Emotions/fantasies are not being balanced effectively, interfering with cognitive activity. With this observation, the therapist shifts back to Step 2. The child is presented a display of 20 buttons of three sizes and colors and asked to locate all of the smallest green buttons immediately next to medium white buttons.

Planning and Conducting a CCT Program for a Child

Using diagnostic data as a guide, the therapist selects a program and a level within that program, the complexity of which matches the child's developmental cognitive capacities, and continues in a stepwise fashion to programs requiring developmentally higher cognitive capacities.

To facilitate our discussion, consider children outlined in Table 4.2, referred for assistance because of learning disabilities and behavior problems and who show one or another cognitive dysfunction (e.g., short attention span, highly distractible, unable to stick with a task, forgetting assignments). Mary has difficulty using her imagination (outer-oriented), struggling with writing make-believe themes. Tom shows an inner orientation, frequently lost in thought and tuned out. John frequently aggresses verbally and physically

and is extremely restless. Sally is excessively distractible, frequently shifting between the content of school tasks and fantasy.

Because observations and history indicate Mary's developmental failure occurred at all stages of cognitive control functioning, her program begins with treatment in the developmentally earliest cognitive control, body ego—tempo regulation, and accordingly with the *Who Is Me? Where Is Me?* program. As Mary develops some ability to attend to body perceptions and construct images representing them, the next program in the hierarchy is phased in *(Moving Fast and Slow)* and then the next *(Follow Me),* and so on, progressing systematically to therapy in conceptual thinking. In this way, her course of therapy proceeds in a stepwise fashion with each developmentally higher program phased in as Mary gives behavioral evidence that the cognitive control being treated has developed competence.

But we have already noted that each program consists of several steps: from those where the tasks require that the cognitive control being treated manage information as it is to those where the tasks require that the cognitive control manage information that is transformed in the process of symbolic functioning and pretending. Therefore the next consideration concerns the sequence in which Mary is administered the steps of each program. The guideline followed in CCT is that the pathological orientation of a child determines the sequence in which the steps of a program are

conducted. The outer-oriented child begins with tasks that initially fit the child's tendency to avoid the prescription of fantasies, and gradually moves to those that require the information be processed while engaged in fantasy. The inner-oriented child follows an opposite sequence, beginning with tasks that initially fit the child's tendency to engage in fantasies and avoid the requirements of reality information, and gradually moves to those that require the cognitive control being treated manage information without the participation of fantasy.

Table 4.2. Planning the Starting Point and Course of CCT

ASSESSMENT OF COGNITIVE CONTROL	MARY	TOM	JOHN	SALLY
Equivalence Range (ER)	Narrow, concrete	Narrow, concrete	Narrow, concrete	Narrow, concrete
Leveling-Sharpening (LS)	Unstable images	Unstable images	Unstable images	Adequate
Field Articulation (FiAr)	Indiscriminant attention deployment	Indiscriminant attention deployment	Adequate	Indiscriminant attention deployment
Focal Attention (FoAt)	Narrow passive scanning	Adequate	Adequate	Adequate
Body Ego-Tempo Regulation (B-T)	Global body schema, poor regulation of tempo	Adequate	Adequate	Adequate
Assessment of Orientation	Subtype I: Outer Orientation	Subtype II: Inner Orientation	Subtype III: Aggressive	Subtype IV: Shifts in Orientation
Treatment Prescribed	1. Restructure all cognitive controls	Restructure FiAr, LS, & ER	Restructure LS & ER	Restructure FiAr & ER
	2. Follow guidelines for outer orientation	Follow guidelines for inner orientation	Follow guidelines for aggressive disorders	Follow guidelines for shifts in orientation

In our example, Mary is handicapped by an outer orientation. Therefore, each program administered would begin with steps presenting "outer-oriented tasks" and gradually shift to steps presenting "inner-oriented tasks." In this way, the requirements of each program initially respect and fit Mary's pathological orientation and gradually promote flexibility and autonomy from external stimuli.

Continuing with the examples listed in Table 2, Tom's profile indicates adequate development in the first two cognitive controls and dysfunctions beginning with field articulation. Accordingly, his treatment begins with the program *Find the Shapes* and gradually phases in the programs *Remember Me* and *Where Does It Belong?* in that order. Because of his pathological inner orientation, each program begins with "inner-oriented" steps and gradually shifts to the "outer-oriented" steps. The description of each program presented in Chapters 5 through 9 include instructions to introduce the outer- and inner-oriented child into treatment.

With the next illustration, John shows dysfunctions in two developmentally advanced controls which call for therapy to begin with the program *Remember Me* and continue with the program *Where Does It Belong*? Because John also shows a major aggressive disorder, these programs are conducted using techniques, described in Chapter 10, which integrate John's aggressive actions, fantasies, and language within the tasks. Sally shows

dysfunctions in field articulation and equivalence range, illustrating a case in which cognitive controls in need of treatment are not sequenced. Her treatment would first consist of tasks from the program *Find the Shapes* and then from the program *Where Does It Belong*? To restructure Sally's pathological shifts in cognitive orientation, each program is conducted using special techniques, also described in Chapter 10.

As these examples illustrate, all children may not require each of the therapy programs, but when two or more programs are required, they are conducted in a sequence following the cognitive control hierarchy. In this way, therapy in the first program administered fosters cognitive capacities that are prerequisites for the next. Further, once a program is selected, a child may require all or a few of the steps of that program and may require many or a few sessions with a particular step before moving to the next. How does the therapist determine whether a child successfully meets the requirements of a particular step?

Criteria for Success. The steps of each program are defined by tasks containing fairly explicit requirements representing various levels of complexity. Exceptions are the program *Who Is Me? Where Is Me?* and *Where Does It Belong?* where the cognitive competence being developed is clearly defined but the task requirements are less structured and left more to the clinical judgement of the therapist. With programs that contain fairly explicit

task requirements at each step, the following guideline is recommended: before moving to a more complex task, *a child should successfully handle three trials or tasks in succession at the same level of complexity without showing disruption in the cognitive process required and/or high levels of stress/ anxiety or other affects* (e.g., fatigue, boredom, opposition). For example, if a child, treated with the program *Find the Shapes,* accurately retrieves in three successive trials particular cutouts designated by the therapist from a field of 15 (consisting of two shapes, two colors, and two sizes), and shows some pleasure in working, the therapist could introduce a more complex field of 20 cutouts (consisting of three shapes, three colors, and three sizes).

Materials Used in the Tasks. The tasks of each program make use of materials such as geometric cutouts; rods; black, white and primary colors; lines and contours; buttons; pieces of cloth; and other familiar objects. These materials are selected because, as mentioned earlier, the cognitive controls of children being treated were compromised during their first three years and engaging information results in stress. Therefore, to rehabilitate dysfunctional cognitive controls, the materials and tasks should "take the child's cognition back" to an earlier phase during which cognition functioned in a "conflict-free" sphere of experience dealing with shapes and patterns similar to those an infant engages in the first two years. The materials and tasks used, such as pursuing a moving cube or discriminating a field of cutouts, are not ends in themselves but means to an end—namely fostering

the cognitive control of information from reality and fantasy as a psychologically nourishing, pleasurable activity.

The programs also require material, such as a toy spider and pictures of a wounded soldier or of a baby feeding, as a way of arousing fantasies/ emotions. These stimuli create stress for the outer-oriented child whose cognition automatically turns away from and defends against fantasy/ emotions. But these very stimuli are welcomed by the inner-oriented child for whom geometric cutouts are stressful since for her cognition automatically turns away from and defends against the requirements of external reality.

The stress a child experiences in response to stimuli and task requirements is a function, then, of the child's cognitive orientation. Therefore, the therapist should be aware of when a pattern of geometric cutouts to be remembered is a welcomed stimulus, readily assimilated by a child, while a pattern of rubber, mythical creatures is rejected and vice versa.

Conducting a Program and Developing a Child's Self-Observation. Instructions to introduce a program and explain the tasks of each step are provided in the chapters to follow. The therapist should, of course, modify the statements suggested to suit the child's language ability. Moreover, given the view maintained by CCT of the place language holds in cognitive therapy, the therapist is urged to keep verbalizations to a minimum initially and to learn

which words have "steering power," or those words which influence or modify a child's behavior.

During the first session, and whenever indicated thereafter, the therapist actively cultivates the child's understanding of the reason for asking her to deal with particular tasks, rather than to play, and attempts to indicate what the child and therapist hope to accomplish. The child should eventually understand that the treatment program is intended to change how he/she thinks and what interferes with the control and use of information, whether from reality or fantasy. In the next chapters, the goals of each program are stated in the language of therapists. The therapist's job is to convey these goals in the child's language. One way to accomplish this is to use the name of the program from the beginning. When a child is told, for example, "We are going to play a game called *Follow Me"* and then immediately is asked to track a target moved by the therapist, the activity coupled with the name *Follow Me* begins to set the stage for the child's understanding that the goal of the treatment is to develop further the ability to sustain attention on moving information. Similarly, the name of the program, *Remember Me,* along with the first task begins to cultivate an understanding that the goal is to remember increasingly larger fields of information and to compare what one remembers to perceptions of present information.

The understanding a child cultivates of the treatment goals relates to

the task of developing a child's capacity for self-observation, a major aspect of CCT. Self-observation emerges within a treatment process that is cultivated by a therapist with clinical flexibility, skill in interpersonal relating and negotiating, and careful management of transference and resistance, each a hallmark of psychodynamic therapy. Therefore, although the steps of each program are described in structured, mechanistic terms, the programs should not be conducted in a mechanistic manner within a relationship that takes on the quality of an instructor and pupil. Rather, the tasks should be administered as arenas within which child and therapist transact and negotiate, creating a process in which the child has the freedom to relive pathological modes of thinking and adapting, become conscious of these behaviors, and modify them.

Because the tasks make use of simple materials and require specific cognitive/behavioral responses, they provide a child with an excellent opportunity to make fairly molecular observations of his/her cognitive functioning and the factors that disrupt its efficiency. In terms of developing a child's self-observation, the course of treatment defines three phases. In the first, the therapist encourages the child *while engaging tasks* to observe repetitive behaviors/emotions that compromise the efficiency of the particular cognitive control being treated (e.g., walking away to pick up a toy while tracking a moving target; vigorously scratching while actively scanning two rods set far apart; suddenly throwing or banging task materials; yawning

with fatigue and/or boredom; hurling vindictives at the tasks or therapist). As the child develops the capacity to observe, the therapist, in the second phase, helps the child establish connections between these behaviors and the particular ingredients of tasks that increased in complexity and therefore increased stress (e.g., the target to be tracked moved through a curvilinear path versus a linear one; two rods to be scanned and compared were set 6 feet versus 3 feet apart; the number of geometric cutouts to be remembered increased from six to nine). When the child shows capacity to observe the relation between behaviors/affects that interfere with cognitive efficiency and ingredients of the tasks, the therapist, in the final phase, helps the child relate tasks and behaviors in the office to similar situations and behaviors that occur at school and home. It is only in this last phase, when the child shows a solid ability to observe and generalize behaviors, that the therapist includes interpretations that integrate aspects of the child's personality dynamics, the styles of other persons (teachers, parents), and ingredients of situations that usually result in maladaptations.

The Use of Modeling. Throughout each program the therapist is urged to demonstrate and model the response required by a task. Previous chapters detail the proposition that in structuring psychological behavior, the action mode should dominate initially, and the child should initially assimilate the actions of models. The programs, *Who Is Me? Where Is Me?* and *Moving Fast and Slow* in particular require the therapist "to speak" with his/her body,

modeling postures and gestures. While other programs subordinate body movements, the therapist should still be active, modeling the task requirements. The therapist who is inclined to conduct therapy primarily verbalizing requirements, or by engaging a child in verbal interactions, is encouraged to be aware of this tendency and to use modeling as often as indicated as a way of interacting. This issue is stressed because in normal development before age 3 the structuring of cognitive controls and of a flexible cognitive orientation does not take place as the child responds to and assimilates verbal statements. Rather, important structuring takes place by the second birthday—long before language is fully developed (see Chapters 3 and 11).

The Last Step of a Structured Treatment Program. Once the outer-oriented child reaches those steps of a program that provide therapy within symbolic functioning, and once the inner-oriented child reaches those steps that provide therapy with information that does not require pretending, each child participates in a final step where the therapist prescribes and directs a fantasy the child is asked to enact. The therapist embeds within this fantasy various tasks that require the child to use the particular cognitive control that has been treated. Gradually the therapist relinquishes giving direction and passes on to the child the freedom to invent play themes, fantasies, and activities, which similarly involve the cognitive control process treated. This step is included to cultivate the child's cognitive flexibility and autonomy,

both from the requirements of reality and fantasy, making available the particular cognitive control as a tool to serve efficient learning and adaptation. This step is also included to provide a bridge to a phase of non-directed play/verbal therapy, if indicated, within which the child articulates and restructures pathological metaphors that have been a source of maladaptation. Techniques for this non-directed phase are discussed in Chapter 10.

DURATION/FREQUENCY OF SESSIONS AND LENGTH OF TREATMENT

In a majority of cases the duration of each session has been the traditional 50-minute hour. However, in a number of cases presenting severe degrees of cognitive and emotional pathology (e.g., borderline states, autistic and/or schizoid features), we have made use of sessions lasting only 15 or 20 minutes but conducted several times a week (or even two times a day in residential programs).

As for frequency, for severe cognitively disabled children, fewer than two sessions a week is ineffective. Three or four sessions per week is highly desirable, especially with inpatient populations, with each session abbreviated to 20 or 30 minutes. If the cognitive deficits are less severe and/or if CCT techniques are blended within a course of traditional psychotherapy, one session a week could be effective.

The duration of treatment varies, of course, with the severity of the child's cognitive pathology and adjustment problems and therefore no guidelines are available. In our experience the CCT method has been effective with some cases when applied for about twelve months (weekly sessions) while in many cases, because of the severity of the pathology, 2 or 3 years of treatment have been required to turn the tide.

GENERAL ARRANGEMENTS

Any typical playroom or clinical office is an appropriate setting for CCT. However, if a child requires therapy in body ego-tempo regulation and in focal attention, a space as large as 10 by 20 feet may be required, and an even larger space, such as a school gym, is desirable. The only pieces of furniture required are a table about 4 feet long and suitable chairs.

Except for the materials used in CCT, there should be a minimum of toys and play materials present during the first phase of treatment. One reason for suggesting that play materials not clutter the office is that in addition to the therapist, the geometric cutouts, rods, and other materials described in the next chapters take on significance in the transference. Because the geometric cutouts, for example, are the information the child must process, and because the child has experienced lifelong stress and conflict between cognitive structures and the demands of information, the cutouts become the target of

transference and resistance. Material unrelated to the tasks could interfere with this transference development. The manner in which the child experiences and behaves with the material used and how the child fights against and flees from the task, allows the therapist to teach the child about ingredients that underlie school failure and related personal problems.

THE TECHNIQUE OF DIRECTED FANTASY

As noted above, in the final step of each program, the therapist directs the child in constructing and enacting fantasies which include the cognitive control process being treated. When this step is introduced, the child has already achieved the capacity to use the control mechanism to manage information as it is and as it is when transformed with conventional and personal symbols. Therefore the child is equipped to extend this competence into sustained pretending.

By engaging in cognitive activity within sustained pretending, the child cultivates several developmental skills achieved by the normal 3-year-old (see Chapter 3) (e.g., flexibly substitute objects with others; infer what ingredients make the substitutions possible; appreciate the requirements of reality and fantasy; enact the requirements of fantasy in experimental action and accommodate to the requirements of reality in experimental fantasy; sustain pretending and experimental action for a period of about one hour). A

phase of sustained pretending also provides a bridge to a phase of non-directed verbal/play therapy in which the child reforms key pathological metaphors.

Each program description includes examples of fantasies the therapist could direct, and Chapter 10 describes examples of sequential motifs that occur in a non-directed format and the techniques used to reform metaphors. Therefore in this section, we list only the key steps followed in the technique of directed fantasy. In considering these steps, it may aid the reader to review the concept of metaphor presented in Chapter 2.

Step 1. The therapist describes a situation, events, and characters (human and/or animals; mythical figures). The content of the fantasy relies upon observations gathered while conducting the structured steps of the program and knowledge of the child's adjustment problems and past history.

Step 2. The therapist assigns a character (identity) to the child and one to the therapist and prescribes a task that emphasizes the cognitive control process being treated.

Step 3. Child and therapist *enact* the prescribed roles and pretend events.

Step 4. As the fantasy is enacted, the child is encouraged to elaborate its

ingredients with directed questions, e.g., "Who else comes along?" "What happens next?" "If the detective can't do that, what does he do next?"

Step 5. The therapist helps the child extend the fantasy to include other situations/characters/events, or to prescribe another fantasy that may be manifestly different. In the structured form of this technique, the therapist insures that the new activities included emphasize cognitive control functioning (e.g., scanning an array of wooden cutouts, which child and therapist pretend are various weapons hidden by the enemy in a cave; examining this array of cutouts to determine whether they are the same as a cache of weapons found earlier).

Step 6. As the fantasy is extended and/or transformed into others, the therapist is active gradually guiding the child in measured steps to include several ingredients in the sequence noted below.

1. The fantasy articulates that a "good force" is opposed by a "bad force" each represented by one or more fictitious characters.

2. The unique powers of the bad force are elaborated along with its intentions and the behaviors and activities it prescribes.

3. The good force is provided initially with defenses capable of providing protection against the unique powers of the bad force (e.g., special suits that have the power to deflect dangerous beams of "green light" that come from the evil

force).

4. As the bad force is elaborated and the good force equipped with special defenses, the good force is assisted by allies—other characters with attributes that are particularly suited to deal with the evil force.

5. These allies give rise to the identity of an "ego ideal"—a character who is usually the leader of the allies (e.g., "the king's highest servant," "the queen's First Commissioner," "the assistant of the village chief"). The ego ideal embodies special powers and represents standards concerning rules and regulations, honesty, civilized behavior, the value of effort in succeeding. Frequently the child assigns the role of the ego ideal to the therapist, and later alternates the roles of good force and ego ideal with the therapist. Of course, sometimes the child also assumes the identity of the character representing the bad force.

6. The good force, assisted by the ego ideal enacts a solution in which the bad force is gradually overpowered, reformed, and civilized. The intentions and behaviors of the bad force are changed, and the bad force becomes an ally of the good force.

Step 7. Interpretation and insight. When this technique is used in a short-term phase of therapy, the therapist does *not* make interpretations. Usually a child is not aware of the meaning of particular symbolic characters and happenings nor of the possible relationships between the child's real maladaptive behaviors and those imputed to the evil force. After enacting a

series of fantasies, some children spontaneously identify a relationship between the symbolic bad character and themselves or an acquaintance, suggesting that some issues are surfacing to awareness (e.g., "That Charlie Chink—a fictitious character representing a bad force—is just like Tommy; he's always swearing in school and breaking everybody's things."). The therapist acknowledges these relationships, and at most clarifies them, but does not interpret a relationship to the child or some motivation/dynamic/wish on the part of the child.

The "insight" the child gains during a short-term phase of directed fantasy is primarily "behavioral," "nonverbal," and "non-conceptual" and represents a corrective experience. Following discussions in previous chapters, it is assumed that as the child assimilates the identity of the ego ideal, and the imaginary experience of protecting against and eventually overpowering and reforming the bad force, some aspect of the child's pathological metaphors undergo change and begin to prescribe less maladaptive ways of construing events and behaviors/emotions to deal with them. Interpretations are included, as outlined in Chapter 10, when a sequence of fantasies are recycled during a more long-term, non-directed format.

To conclude this section, several additional issues should be noted. A single directed fantasy, or even two or three, usually cannot cover all of the

steps listed above. However, a single fantasy could include the first five steps as illustrated in the examples given in the next chapters. To benefit from these five steps, the child ideally should engage in cognitive control activity within several fantasies enacted over several sessions. Many more sessions and directed fantasies are needed to engage Step 6 efficiently during which the child elaborates good and bad forces, defenses required by the good force, an ego ideal that comes to its assistance, and the final reformation of the bad force.

One child may require only one or two sessions with Steps 1 through 5 and readily move into Step 6. Another may be capable of engaging in only two or three directed fantasies following the first five steps. Last, the more the therapist joins the child in acting roles and elaborating pretend situations and events, the more effective the technique. The therapist accustomed to treating children from a chair will need to reconsider his/her style to make optimal use of this method.

EVALUATING SYMBOLIC FUNCTIONING

Each treatment program includes tasks that require the child to construct symbols representing body positions and tempos and materials the child manipulates within cognitive control functioning. During these tasks, the therapist is required to help the child evaluate the symbols constructed.

Three guidelines are followed, which have proven effective with children as young as 6 years old, as well as with adolescents. When evaluating symbols in terms of these guidelines, the child should not believe that "there are right and wrong answers." Rather, the guidelines are designed to help the child understand how symbols can vary as representations carrying meaning and as communications to others. The goal over the course of treatment is to help the child develop an appreciation of the requirements of reality and fantasy and understand how the two can be related. The discussion that follows assumes the reader has reviewed material on symbolic functioning in Chapter 3. The examples given come from a study of the symbols children constructed when construing how they might use a thin green wooden stick (from a Lincoln Log® game set) and a paper clip. Examples involving objects used in the treatment programs are given in the next chapters.

Evaluating the Fit Between a Symbol and Attributes of Objects Symbolized

With this guideline a child is asked to articulate the physical or functional attributes of the object symbolized and determine how they fit the symbol. For example, when asked to imagine and pretend what one could do with a green stick, one child noted "You can open a can of paint with it," and another, "You can use it like a spoon and stir things like lemonade." With the first, the child is helped to evaluate that the stick would likely break if the can has never been opened and could probably open a loose lid. With the second,

the evaluation would point out that the properties of the stick fit the pretend usage.

Similarly, when asked to pretend usages for a paper clip, one child said, “You can stick it in your nose," another, “You can hang a key on it." In evaluating these responses, each child develops the understanding that the properties of the paper clip fit each pretend usage. The child who produced the first usage was also helped to understand its highly personal meaning. (See below.) In contrast, a child who pretends “It's a saw you cut wood with," would be shown that the paper clip is small, does not have cutting teeth like a saw, and so on.

Evaluating Whether a Symbol Is a General or Specific Statement of the Attributes Construed

With this guideline the child cultivates an understanding of when symbols are overly extended, or global, versus specific. For example, in pretending usages of a green stick, one child responded, “You can hit someone on the head with it," and another, "You can make a straight line like a ruler." Evaluating the first, the child is helped to see that the pretend usage is a general statement, since many different objects can be used to hit someone on the head (e.g., a rock, a book, a marble, a shoe). The second symbolic use is more specific to the properties of the stick. With the paper clip as a stimulus, the symbolic use, "You can stick it in your nose," represents a more general

statement, and the child is helped to understand that many other items can be placed in one's nose (e.g., a button, a marble, a crayon); while the use, “You can hang a key on it," is more specific. Similarly, if a child pretends, "You can do a magic trick with it and make it disappear," the child is helped to understand that as construed, the symbolic use is a general statement since many other similarly small items can be used in magic tricks. In contrast, "You can clip it on your fingernails," is a relatively specific symbolic use of the properties of a paper clip.

Evaluating Whether a Symbol Is Conventional or Personal

Here the child cultivates an understanding of when and how a symbol communicates to others as well as to oneself, and that conventional symbols are readily understood by most persons while personal symbols are more likely understood only by the person or a close friend.

Using examples given above, pretending to use a stick to open a can of paint or to stir lemonade, although differing in the degree of fit, represent conventional symbols since someone else is likely to understand the symbolic use. In contrast, pretending to use a stick, "to build a farm," or “to make the stomach of a puppet," or as "a bridge over a river," represent personal symbols, the meanings of which are not readily understood by someone else. Along the same line, pretending to use a paper clip with others to make a

necklace is a conventional symbol; while pretending to use it “to make a castle and this is the top part of it," or putting it in one's nose, are more personal symbols, the meanings of which are not readily understood by others.

MANAGING TRANSFERENCE AND RESISTANCE

As the clinician would guess, it is frequently not possible to conduct a prescribed course of therapy as planned. At various times along the way, the child regresses and resists working with tasks. CCT ascribes to the psychoanalytic view that managing and resolving transference and resistance is necessary in order to modify and reform behavior.

What is meant by transference and resistance? While interacting with the therapist, the child repeats, bit by bit, the methods she has used to conduct her emotional life and to engage in learning. These methods are developed from past experiences with caretakers and environments. When repeating past behaviors, the patient construes and experiences the therapist as if she were one of these past caretakers, a process Freud referred to as transference.

Resistance to change represents the other side of the same coin. Freud observed that resistance is often graphically displayed by a patient in transference experiences with the therapist. By experiencing the therapist as

someone else, rather than as a therapist, the patient is justified in using old, maladaptive ways of coping and therefore refuses to suspend these habitual ways of behaving and to assimilate stimulation and persons as they exist, rather than as they are imagined. Thus, much of a person's behavior in the transference is viewed as serving resistance to change; and from this view transference becomes synonymous with the process of resistance.

While the patient's transference behaviors block change, they simultaneously make available unique opportunities to promote change. As the patient relives unsuccessful ways of behaving, experiencing the therapist as someone else, the therapist can behave in ways that are different from past caretakers and therefore restructure the maladaptive behavior. An early statement by Freud emphasizes the importance of this process in psychotherapy and also serves to clarify CCT as a psychodynamic process, distinguished from methods of perceptual training and behavior modification.

> . . . we must (eventually) treat his illness not as an event of the past, but as a present day force. This state of illness is brought, piece by piece, within the field and range of operation in the treatment, and while the patient experiences it as something real and contemporary we have to do our therapeutic work on it . . . (Freud, 1914, *Collected Works,* Standard Edition., Vol. 12, p. 151)

In ascribing to the management of transference and resistance as the nexus for change, CCT proposes that with cognitively disabled children, the conflict to be resolved does not exist between wish and defense but between

cognitive structures and information in the environment and/or fantasy. These children habitually use immature cognitive control behaviors (e.g., narrow scanning or an outer orientation), which may have adaptively managed environments and caretakers in the past, but are now maladaptive in assimilating present stimulation and persons. The mismatch between cognition and current stimulation results in stress and flight and fight behaviors, which the patient repeats in the treatment situation, experiencing the therapist and the therapeutic tasks as carbon copies of earlier caretakers and situations. These maladaptive modes of functioning are tenaciously repeated, rather than examined, and thus become resistant to change.

Since the cognitive dysfunctions being treated were structured during the first three years of life, it would follow that the transference behaviors these children reveal repeat modes of negotiating that derived from that period. What we need, then, to organize observations in the treatment room and guide technique is a developmental model of mother-infant interaction during the first three years of life. The model the author has adopted for this purpose derives from the work of Louis Sander (1962, 1964, 1976).

Sander's Model of Mother-Infant Interaction

On the basis of longitudinal observations, Sander has proposed that infant and mother "negotiate" nine "issues," defining developmental periods

which contribute to the structuring of the infant's ego functions (e.g., perception, motility, expressions of earliest emotions, and style of seeking and avoiding stimulation and caretakers).

Initial Adaptation (0-3 Months). This issue concerns fitting together mothering activities (e.g., affects, type, and timing of stimulation) with cues the baby gives (e.g., states of alert inactivity, various cries, smiling, fussiness) with each influencing, assimilating, and accommodating to the other. Successful negotiation of this first issue is reflected in the infant's organized rhythm of feeding and sleeping, and the extent to which mother feels she "knows" the child.

Establishing Reciprocal Exchange (3-6 Months). This issue concerns the extent to which interactions between mother and infant include active-passive exchanges (e.g., during feeding and around the infant's rapidly developing smiling response) and the extent to which mother can allow the child to play or pursue some activity by himself.

Early Directed Behavior (6-9 Months). The baby takes more initiative directing his own behavior and the behavior of others, intends to engage a person or stimulation, anticipates a response or stimulation, and attempts to control stimulation that is approaching, avoiding, or disappearing. One major accommodation required of mother is that she should honor the infant's

preferences by removing or bringing particular objects within reach.

Focalizing the Caretaker (9-15 Months). The infant negotiates the unconditional availability of mother by making increasingly more explicit requests for particular types and rates of stimuli and for protection from danger and stressful stimulation, a dominant need as the child becomes physically more mobile and explores larger space. Mother's responses may require physical contact or only cues revealing her attention and awareness. By focalizing and guaranteeing mother's availability and trust, the child establishes a base from which he can move away from mother and explore larger environments.

Self-Assertion (12-20 Months). With a secure feeling that he can separate from mother yet have her available, the child begins to assert himself *in opposition* to mother, showing more negativism, possessiveness, and exhibitionism in various negotiations (e.g., toilet training, returning a toy to a sibling). Mother phases in limits and permission, responses that vary in consistency, ambivalence, and guilt as well as in the inventiveness she uses to suggest alternatives (e.g., offering a less dangerous but related kitchen utensil the child insists on using). To negotiate self-assertion, the child must sense that his victory can be accepted by the mother. If mother's behaviors are severely limiting, the child could surrender self-assertion and active exploration.

Initial Testing of Destructive Aggression (18-24 Months). The child experiments with explicit aggressive behavior (e.g., destroys a toy, scatters material) performed with a sense of triumph ("John John do!") and followed by "making up" (e.g., sticking a piece of scotch tape on broken china). Mother should distinguish among the child's various destructive intentions (biting in play versus in anger), phase in alternative behaviors the child could employ (banging a toy hammer against a pot instead of a refrigerator) and initiate making up (engage the child in repairing a damaged object).

Modification of Aggressive Intent (24-36 Months). The child gradually accommodates to and internalizes the caretaker's standards, begins to show socially acceptable aggressive play, modifies his omnipotence in keeping with reality testing, and strengthens his identification based upon parental modeling, gains which are tested while aggressing in other environments (e.g., preschool).

Extending Secondary Process Functioning in Interaction (12-36 Months). Negotiations serving earlier issues also help the child elaborate speech, symbolic representation, and pretending. The mother understands, responds to, and stimulates the child's pretending, and the child internalizes pretend communications provided by mother. In solidifying their relationship through symbols and pretending, mother and child develop an understanding of each other's intentions and the alternatives available for mutual exchange.

Consolidation of Body Image (0-36 Months). Throughout the 3-year period the child constructs and solidifies a body image and sexual identification, expressing curiosity in his body and the bodies of others in exhibitionistic, seductive, and auto stimulating behaviors. Parents respond with stimulation and prohibitions and communicate about the body and its parts. Through these transactions the child develops cognitive schemata of body and a sense of self.

Guidelines to Negotiate Transference and Resistance

Relating Sander's model to our earlier discussion of transference and resistance leads to the following assumptions: when in a therapeutic process, the child resists changing his pathological modes of functioning by transferring behaviors from issues noted above, which were not adequately negotiated with caretakers during the first three years of life (i.e., before language was fully developed). In other words, when coping with a conflict between the competence of her cognition/personality and the pace and complexity of stimulation, the child regresses to one or more of these issues repeating old, maladaptive ways of negotiating. Accordingly, the resistant behavior does not give way to verbal interpretation as much as to *interactive* behaviors by the therapist which engage the child in renegotiating these issues. Common forms of resistance shown by children who require CCT include testing aggression and excessive self-assertive- ness or its opposite

(e.g., passivity, fatigue, engaging in stereotyped activity). These behaviors serve to control the therapist and stimulation and to preserve old ways of behaving.

By adapting Sander's model to our needs, several technical guidelines are suggested.

Initial Adaptation. The therapist works to "know" the patient's unique postures, rhythm of activity, and preference for pace of stimulation and to understand the degree to which the therapist's own rhythm matches that of the child. Examples: One child habitually engaged tasks with a slow tempo; another regularly pierced space like an arrow, and after vigorously engaging a task, slumped in a chair and withdrew. The therapist accommodated to these rhythms. One child commented that the lights were too bright and a wall decoration "crazy with too much color." The therapist changed this stimulation.

Reciprocal Exchange. The therapist searches for opportunities to engage the child in active-passive exchanges, especially with affects that match the child's range and intensity. Examples: One child exclaimed, "Wow!" and threw up his arms in pleasure when he correctly identified which of two beakers contained the most water. The therapist spontaneously imitated the child's pleasure. When a child showed increased resistance to memorizing patterns

of geometric cutouts, the therapist invited the child to give him a pattern to memorize.

Early Directed Activity. The therapist is alert to being passive in response to the child's directions, especially as the child attempts to seek or avoid therapeutic tasks. Examples: One child insisted that the work take place on the floor instead of the table; another that the tasks be located on the left side of the table; and another directed that while she worked on a task the therapist sit at the far end of the room. The therapists followed these directions without interpretation.

Focalizing. The therapist insures his/her availability and awareness of the child's unique needs, responding initially with behaviors and later verbally. Examples: One child repeatedly broke the point of a pencil and then looked to the therapist who sharpened the pencil each time; another positioned her arms to bring attention to an assortment of minor scratches. The therapist showed concern and applied Band-Aids®. Another child climbed to the top of a cabinet whenever the cognitive task became difficult. Each time the therapist lifted the child to the floor expressing concern for his safety.

Self-Assertion, Testing Destructive Intentions, and Modifying Aggressive Behavior. The therapist views the child's assertive and aggressive behaviors

as part of a process in which the child establishes autonomy, acquires pleasure in achievement, and pursues information with excitement and curiosity. The therapist accepts without ambivalence the child's sense of victory after showing defiance, carefully discriminates among aggressive behaviors, and provides alternatives that render aggression more socially appropriate. Whenever possible, the alternative behaviors should integrate some aspect of the child's aggression with aspects of the cognitive task at hand. Examples: One child suddenly became aggressive, throwing geometric cutouts across the room, when his task was to point to cutouts named by the therapist. The therapist set up a box across the room and invited the child to try "to win points" by throwing the cutouts named into it. Gradually, several boxes were set up each offering different points. Then, the therapist designated that the highest score is earned by throwing the cutout into the box in a slow arch and the lowest by hurling the cutout in a direct path. Over several sessions the child gradually modified his aggressive behavior, eventually continuing with tasks by pointing to the cutouts rather than throwing them. In modifying aggression with the help of these "games," the child pretended aggression on some occasions, playfully flipping a cutout across the room. The therapist raised his eyebrows and smiled. The child beamed victoriously and continued with the task.

Extension of Secondary Process Functions in Interactions. The therapist cultivates an understanding of the child's unique symbols and cultivates the

child's use of pretending. Further, the therapist introduces verbal statements and symbols to help the child become aware of the stress experienced when managing tasks, the cognitive/behavioral strategies the child uses to reduce stress, how behaviors observed in the office resemble those that occur in school and home, and which alternative behaviors are possible.

Case Illustrations: Managing Resistance in Psychotherapy Versus CCT

To illustrate the approach proposed to manage resistance, let us compare the management of resistance by a neurotic child in psychotherapy with that by a cognitively disabled child in CCT. At one point in treatment a young girl, suffering from neurotic symptoms, sat under the therapist's desk, placed several cardboard boxes around it, and declared she did not want to come anymore to “this stupid place." The therapist commented she was hiding from him and protecting herself with a wall, and maybe they could find a way of telling him what the hiding was all about.

In the next session, while sitting silently under the desk, she began passing “notes" (one or two words conveying no meaning) to the therapist. Bit by bit, the therapist noted it seemed she had secrets she wanted to share yet also hide, that maybe she imagined she would be punished if she revealed her secrets, and that as her doctor he wanted to help her with her worries. When this interpretation was fully constructed she came out from her

enclosure and engaged in doll play, with parent dolls angrily scolding and spanking a child doll for being “naughty" and "dirty," and because sometimes the child doll “touches things she shouldn't."

This sequence is familiar to clinicians practicing child psychotherapy. The child resisted by crawling under the desk, refusing to engage the therapist. The resistance was resolved as the therapist made several statements guided by a model of intrapsychic conflict: that by hiding under the desk the child was hiding from past and contemporary behaviors forbidden by internal standards, that she had transferred onto the therapist punitive attitudes that belonged to others, and that keeping these behaviors and wishes hidden maintained guilt and anxiety at a tolerable level. The resistance was resolved when the child's guilt, and fear of punishment by the therapist, were brought into awareness and distinguished from the therapist as a helping figure. Resolving the resistance enabled the child to elaborate her internal conflicts further in doll play and to continue participating in the treatment process.

In a course of CCT with an 8-year-old boy the therapist had been conducting tasks which involved regulating various body tempos and scanning moving targets. At one point the therapist presented a new, more complex task, asking the child to scan two rods, set about six feet apart, and to point to the taller one. The child pushed the rods to the floor, proclaiming he

"doesn't want to play that stupid game" and is going to color instead. Whereupon he took crayons and paper, sat under a table, and busied himself "drawing." The therapist again set the rods on the table and asked the child to look them over. Before the request was finished, the child shouted, "Go (expletive deleted) yourself!" clearly keeping the therapist and his demands at a distance. Yet, on two occasions, the child held up his paper, obviously directing the therapist to lines he had drawn. The therapist showed pleasure with a reassuring nod.

During the next session the child again located himself under the table and busied himself drawing. Again the child blasted the therapist whenever he made contact but also brought the therapist's attention to particular designs. The therapist expressed an interest and waited, drawing lines himself with colored crayons. The child then mumbled to himself that he could not find a crayon. The therapist obtained the crayon and placed it next to the child. The first time the child tossed it across the room. On the next occasion he used the crayon without acknowledgement. Another time he broke a crayon while drawing lines. Without comment the therapist taped the two pieces together and left the crayon which the child subsequently used.

In the next session the therapist asked the child to challenge him by drawing two lines or circles, and the therapist would try to figure out which is bigger. The child accommodated with delight, taking great pains to make

nearly identical drawings. With each task the therapist puzzled, searching for the bigger drawing. Then the therapist asked the child, "to take a turn." The child accepted, working with a set of lines the therapist presented.

In the next session, child and therapist continued taking turns examining lines the other had drawn. The therapist noted it was difficult to tell which line was longer when they were made of different widths, colors, etc. and asked the child to set up two rods because then they could be more sure of the length of each, the distance between them, and so on. The child accommodated and then took a turn. This time the therapist set up rods closer together than several sessions ago when the child first resisted.

Reconstructing this example in terms of the rationale of CCT, the child resisted treatment by pushing the rods to the floor and drawing while sitting under a table. Rather than conceptualizing this behavior in terms of intrapsychic conflict, the therapist viewed it as resulting from conflict between the child's cognitive dysfunction (narrow-passive scanning) and the task complexity he was asked to manage. The child had been visually tracking objects. When given a more complex task (actively scanning two rods), he regressed and resisted. The task represented a strong push for change and created stress. The child managed the stress by angrily rupturing the process of reciprocation and avoiding the therapist as the source of stressful stimulation.

To manage and resolve the resistance, the therapist negotiated reciprocity, focalizing, and self-assertion. In drawing lines with crayons, the therapist imitated the child's behavior, a precursor of reciprocating. In responding to the child's first designs, in locating particular crayons, and in repairing others the therapist insured his availability and focused behaviorally on aspects of the child's needs. Throughout all of these interventions the therapist did not respond to the child's angry vindictives but stepped past them, displaying interest and showing the therapist's integrity was intact.

After insuring his availability, the therapist invited the child to challenge him in a game of judging lines, allowing the child to take the initiative, experience self-assertiveness, and participate in a "game," (pretending). Then suggesting they take turns drawing and judging lines, the therapist provided the child with an opportunity to reenter a reciprocal relationship with child and therapist alternating between active and passive positions. Last, having negotiated reciprocation and self-assertion, the therapist modified the activity the child initiated so that it took on features of the cognitive task the child had abandoned. By negotiating these several issues, resistance was resolved, and the child returned to the therapeutic task until the next, more complex demand led to new resistance and another phase of negotiations.

Two additional points should be made before leaving these anecdotes.

When the child returned to the task the complexity was reduced in an effort to create a better fit between the child's cognition (the two rods were placed closer together), increasing the likelihood that the task would be assimilated rather than rejected. Second, the therapist refrained from making interpretations. In CCT interpretations are used to resolve resistance only after the child has developed considerable awareness of his behaviors and affects when dealing with tasks. At a later time the therapist might say, "When rods are almost the same and placed far apart, figuring out which is taller is very hard so you get nervous and mad." Then, when the child has become aware of the connection between the complexity of information and unique behavioral/affective responses, the therapist points out to the child that he manages nervous and mad feelings by "quitting" the relationship and the task, and by keeping the therapist away "with swear words," and "easy drawings." In the final stages the therapist teaches the child how behaviors in the office are the same as behaviors in school and at home, and guides the child in constructing and experimenting with alternatives.

A Main Technique in Resolving Transference/Resistance

As the preceding example illustrates, in addition to negotiating issues, the major technique used to resolve transference/resistance involves *integrating the resistant behavior within the response process of the cognitive task* at hand. As noted earlier, the most common resistant behaviors are

exaggerated self-assertion and aggression, whether expressed directly or indirectly. Because sublimated forms of self-assertion and aggression are critical aspects of successful learning and competing, it is important that in resolving resistance the therapist not require the child to surrender his/her self-assertion, but promote, bit by bit, a modification of the child's aggression and recruit sublimated aggression within cognitive activity and learning.

In addition to the previously described anecdotes (e.g., the boy who hurled the geometric cutouts), the following examples illustrate the technique in resolving direct forms of assertive-aggressive resistance. One child refused to continue working with tasks, sat silently in a chair at the far end of the room, and angrily scraped the geometric cutouts used in the tasks with her fingernails and with wooden doll figures. While this behavior could be viewed as hostility displaced from the therapist to the wooden cutouts (she was symbolically scratching the therapist), the therapist did not interpret this possible motivation but set out to integrate the resistant behavior into the response process required by the abandoned task. Over a period of time the therapist asked the child to take a file and scrape the cutout that had changed in a display the child was asked to remember (see Chapter 8), then to take a piece of sandpaper and rub it over the shape that had changed, and still later to take a piece of cloth to rub the shape. Another child refused to continue working, took a dart gun, and shot darts at the walls, ceiling, puppet figures, and occasionally at the therapist. Over time the therapist asked the child to

shoot darts at the rod judged to be taller, then to hold the dart in his hand and hit the rod selected according to a dimension designated by the therapist, and then to point to the rod with his finger. Another child refused to work by breaking a rod in two. The therapist set thin sticks alongside of each rod and asked the child to break the stick next to the rod selected in response to the task, and then later to twist one of the coat hangers placed alongside the rods, and still later to straighten out one of the coat hangers.

The following examples illustrate the technique in resolving indirect (passive/inverted) forms of assertive-aggressive resistance. One child, who often complained of being sleepy or tired, rested her head on the table, declared she was sleepy, and refused to continue working. With playful affect the therapist offered that the wooden rods the child had been engaging were also sleepy and wanted a bed to sleep in. The child readily accepted the therapist's invitation that they make beds of cloth. With the next tasks the child was asked to take the rod designated (e.g., taller, thicker) and put it to bed. Later the rods were placed on "beds" of cloth, and the child was asked to "wake up" the rod containing the attribute designated. As "sleepiness" was handled in this imaginary way, the child gradually began to express the anger her sleepiness had masked. When "waking up" a rod, she sometimes exclaimed in anger, "Hey! who woke me up?" Then she began to swat the rods off the pieces of cloth exclaiming, "Hey! Who knocked me out of bed?" As she expressed pretend aggression more directly, versus through sleepiness, she

soon angrily refused to engage the task. The therapist was now faced with resolving another form of the same resistance, but throughout the child was not required to surrender any one form of self-assertion/aggression.

Patience, Ingenuity, and Rebuilding the Alliance

Since children treated with CCT are also handicapped by severe personality disorders, an episode of resistance may sometimes require 10 or 12 sessions to resolve. Throughout, the therapist perseveres, tries one technique, waits, tries another, and waits until the resistance is resolved. Once resolved, at least partially, the therapist works on rebuilding the alliance. One technique that frequently helps is role-reversal or, in psychoanalytic terms, inviting the child to identify with and assume the role of the aggressor. In CCT the child is invited to present the therapist with cognitive tasks which the therapist works on, readily accepting the non-authoritarian role.

Play as Resistance in the Child

Children who are less impaired by character disorders frequently leave the task and engage in spontaneous play. The therapist needs to determine whether the play is serving resistance or working through some emotional conflict that would facilitate progress in CCT. This issue is a potential

stumbling block especially for those who practice play therapy. When first conducting CCT therapists often gleefully pursue some play activity the child introduces, especially if it appears “dynamically rich." But, considerable experience dealing with such developments suggest that by “playing" the child is frequently attempting to control the therapist and avoid the tasks.

To determine when play is serving resistance, the following guidelines are suggested:

1. Over several sessions the play is stereotyped and repetitive, failing to elaborate and organize around an issue (e.g., the same form board game is played many times; numerous “snowflakes" are cut out and hung on the wall).

2. The play does not include elements of the abandoned cognitive task or does not relate to the child's learning and adjustment problems.

3. The child is sleepy or irritated, for example, when dealing with treatment tasks but hums with pleasure while drawing the 10th tulip or carefully aligning furniture and dolls.

Play as Resistance in the Therapist

Training others in CCT methods, the author has observed some therapists become bored by the specificity, analytic rigor, and attention to molecular cognitive activity required by CCT. To find relief, these therapists

follow the child's “more interesting dynamic activity" or initiate play as a diversion. When a therapist retreats into play, he/she is responding much like the cognitively disabled child who retreats into drawings and games to escape the demands and stress of slowly and steadily engaging a graded series of tasks in the service of promoting cognitive growth. Analyzing and reforming cognitive deficits are meticulous and sometimes tedious work, but no more tedious than playing the same "puppet show" for the 20th time.

Play as a Means of Resolving Resistance

As examples provided earlier and in the next chapters illustrate, play may also be useful to resolve resistance and return the child to the hierarchy of tasks being conducted. In CCT the therapist identifies the psychic conflict contributing to the resistance and designs a game for the child to play which integrates the conflict with an element of the cognitive task.

The previous example involving "putting rods to sleep" illustrates brief moments of play. An example of a more sustained use of play is provided by a child who, usually preoccupied with war fantasies, yet readily guilty when asserting, refused the tasks and began drawing elaborate pictures of battlefields filled with exploding bombs. Since the child had been dealing with tasks that required particular shapes be removed from stacks of geometric cutouts (see Chapter 7), the therapist designed a game in which stacks

containing particular cutouts were time bombs that would explode unless found and "defused." The child readily engaged the game, pretended he was a special soldier, while scurrying about and examining towers of cutouts the therapist had placed on the floor.

Making Up After an Episode of Resistance

The therapist should be active making up after an episode of resistance, providing the child with opportunities to experience the fact that her achievements are accepted. Making up also contributes to the child's internalizing the therapist's standards. If resistance includes destructive behaviors, the therapist engages the child in repairing the damaged object. Sometimes a child will make bids to make up, for example, tidying materials in the office or becoming preoccupied with a small tear in a hand puppet.

Insight

The same considerations discussed above in the section on the technique of directed fantasy apply here. When resolving transference and resistance in CCT, the therapist, in the early phases of treatment, refrains from making interpretations. The insight the child acquires is nonverbal and derives from corrective experiences (i.e., from assimilating the behaviors and standards of the therapist who did not react or behave as did early caretakers

or as imagined by the child).

SPECIAL CONSIDERATIONS FOR CHILDREN WITH SEVERE PSYCHOLOGICAL LIMITATIONS

CCT methods have been used to treat children who are severely retarded, autistic, or clinically psychotic. The methods used most often derive from the programs in focal attention and field articulation in an attempt to bring the child's cognition more in touch with reality and/or more able to use fantasy and symbolic functioning as means of rehearsing action.

Because these children frequently refuse or fail to respond to treatment tasks, the therapist conducts a preliminary phase of treatment designed to cultivate the child's ability and willingness to perform the response required. To illustrate, assume an autistic child is presented with a display of black and white cutouts and asked to place the black circles in a box. The child refuses and/or fails to respond.

1. The therapist places the cutouts in the box, repeating the demonstration several times, and makes a few comments, if indicated, drawing the child's attention to the demonstration.

2. If the child does not respond, the therapist takes the child's hand and guides it gently but purposefully to the designated cutout, helps the child grasp the cutout (placing the child's

finger over it if necessary), and guides the child in carrying the cutout to the box.

3. If the child does not appear to be looking at the display, the therapist gently directs the child's head toward the display with one hand, while removing cutouts with the other or guiding the child's hand through a response.

4. The therapist gradually relies on more subtle forms of physical guidance (e.g., nudging the child's elbow or placing a child's hand near a cutout) and later on verbal instructions.

5. The therapist provides demonstration and physical guidance until the child purposely completes a response successfully. When the child removes designated cutouts (by tapping them; displaying a standard) on his/her own initiative, the tasks are slowly increased in complexity following the guidelines described in the next chapters.

All of the considerations given to the issue of transference and resistance apply equally when treating these children. The case report presented in Chapter 11 contains graphic descriptions of behaviors displayed by an autistic boy and the techniques used to manage them.

References

Anthony, E. J. (1956). The significance of Jean Piaget for child psychiatry. *British Journal of Medical Psychology, 29,* 20-34.

Arieti, S. (1970). The role of cognition in the development of inner reality. In J. Hellmuth (Ed.), *Cognitive studies* (Vol. 1, pp. 91-110). New York: Brunner/Mazel.

Arnkoff, D. B., & Glass, C. R. (1982). Clinical cognitive constructs: Examination, evaluation, and elaboration. In P. C. Kendall (Ed.), *Advances in cognitive-behavioral research and therapy* (Vol. 1, pp. 1-34). New York: Academic Press.

Barten, S. S. (1979). Development of gesture. In N. R. Smith & M. B. Franklin (Eds.), *Symbolic functioning in childhood* (pp. 139-152). Hillsdale, NJ: Lawrence Erlbaum.

Beck, A. (1976). *Cognitive therapy and the emotional disorders.* New York: International Universities Press.

Bedrosian, R. C., & Beck, A. T. (1980). Principles of cognitive therapy. In M. J. Mahoney (Ed.), *Psychotherapy process: Current issues and future direction* (pp. 127-152). New York: Plenum Press.

Benjamin, J. D. (1961). The innate and experiential in development. In H. W. Brosin (Ed.), *Lectures in experimental psychiatry* (pp. 19-42). Pittsburgh: University of Pittsburgh Press.

Billow, R. M. (1977). Metaphor: A review of the psychological literature. *Psychological Bulletin, 84,* 81-92.

Bruner, J. S., & Klein, G. S. (1960). The functions of perception: New look retrospect. In B. Kaplan & S. Wapner (Eds.), *Perspectives in psychological theory* (pp. 61-77). New York: International Universities Press.

Bruner, J., & Postman, L. (1948). An approach to social perception. In W. Dennis (Ed.), *Current trends in social psychology* (pp. 71-118). Pittsburgh: University of Pittsburgh Press.

Cacioppo, J. T., & Petty, R. E. (1981). Social psychological procedures for cognitive response

assessment: The thought listing technique. In T. V. Merluzzi, C. R. Glass, & M. Genest (Eds.), *Cognitive assessment* (pp. 309-342). New York: Guilford Press.

Craine, J. F. (1982). Principles of cognitive rehabilitation. In L. E. Trexler (Ed.), *Cognitive rehabilitation: Conceptualization and intervention* (pp. 83-98). New York: Plenum Press.

Decarie, T. G. (1965). *Intelligence and affectivity in early childhood.* New York: International Universities Press.

Dember, W. N. (1974). Motivation and the cognitive revolution. *American Psychologist, 29,* 161-168.

Donahue, P., Rokous, B., & Santostefano, S. (1984a). Cognitive control therapy with children hospitalized in a psychiatric facility. Unpublished manuscript.

Donahue, P., Rokous, B., & Santostefano, S. (1984b). *Cognitive control therapy with outpatient children and adolescents.* Unpublished manuscript.

Ellis, A. (1970). The essence of rational psychotherapy: A comprehensive approach. New York: Institute for Rational Living. Emery, G., Hollon, S. D., & Bedrosian, R. C. (1981). *New directions in cognitive therapy.* New York: Guilford Press.

Erdelyi, M. H. (1974). A new look at the new look: Perceptual defense and vigilance. *Psychological Review*, 81, 1-25.

Feather, B. W., & Rhoads, J. M. (1972). Psychodynamic behavior therapy: I. Theoretical aspects. *Archives of General Psychiatry, 26,* 496-502.

Fein, G. G., & Apsel, N. (1979). Some preliminary observations on knowing and pretending. In N. R. Smith & M. B. Franklin (Eds.), *Symbolic functioning in childhood* (pp. 87-99). Hillsdale, NJ: Lawrence Erlbaum.

French, T. (1933). Interrelations between psychoanalysis and the experimental work of Pavlov. *Psychiatry*, 12, 1165-1203.

Freud, A. (1965). *Normality and pathology in childhood.* New York: International Universities Press.

Freud, S. (1958). Remembering, repeating, and working-through (Further recommendations on the technique of psychoanalysis: II. In *Standard edition of complete works* (Vol. 12). London: Hogarth. (Original work published 1914).

Gardner, R. W., Holzman, P. S., Klein, G. S., Linton, H. B., & Spence, D. P. (1959). Cognitive control: A study of individual consistencies in cognitive behavior. *Psychological Issues*, 1 (4).

Garrity, C. (1972). *Academic success of children from different social class and cultural groups.* Unpublished doctoral dissertation, University of Denver.

Gill, M. (Ed.). (1967). *The collected papers of David Rapaport.* New York: Basic Books.

Glass, C. R., & Arnkoff, D. B. (1982). Think cognitively: Selected issues in cognitive assessment and therapy. In P. C. Kendall (Ed.), *Advances in cognitive-behavioral research and therapy* (Vol 1, pp. 36-75). New York: Academic Press.

Goldfried, M. R. (1980). Psychotherapy as coping skills training. In M. J. Mahoney (Ed.), *Psychotherapy process: Current issues and future directions* (pp. 89-119). New York: Plenum Press.

Golomb, C. (1979). Pretense play: A cognitive perspective. In N. R. Smith & M. B. Franklin (Eds.), *Symbolic functioning in childhood* (pp. 101-116). Hillsdale, NJ: Lawrence Erlbaum.

Gruber, H. E., Hammond, K. R., & Jesser, R. (Eds.). (1957). *Contemporary approaches to cognition.* Cambridge, MA: Harvard University Press.

Guidano, V. F., & Liotti, G. (1983). *Cognitive processes and emotional disorders: A structural approach to psychotherapy*. New York: Guilford Press.

Gunnoe, C. (1975). The evaluation of a structure-based and a skilled-based intervention program for at risk four and five-year old children. Unpublished doctoral dissertation. Harvard University.

Guthrie, G. D. (1967). Changes in cognitive functioning under stress: A study of plasticity in cognitive controls. (Doctoral dissertation, Clark University, 1967). *Dissertation Abstracts International*, 28, 2125B.

Holt, R. R. (1964). The emergence of cognitive psychology. *Journal of American Psychoanalytic Association*, 12, 650-665.

Holt, R. R. (1976). Drive or wish? A reconsideration of the psychoanalytic theory of motivation. *Psychological Issues*, 9 (36), 158-198.

Horowitz, M. J. (1978). *Image formation and cognition* (2nd ed.). New York: Appleton-Century-Crofts.

Kagan, J. (1981). *The second year: The emergence of self-awareness.* Cambridge, MA: Harvard University Press.

Kendall, P. C. (1981). Cognitive-behavioral interventions with children. In B. Lahey & A. E. Kardin (Eds.), *Advances in child clinical psychology* (pp. 53-87). New York: Plenum Press.

Kendall, P. C. (1984). Social cognition and problem solving: A developmental and child- clinical interface. In B. Gholson & T. Rosenthal (Eds.), *Applications of cognitive-developmental theory* (pp. 115-148). New York: Academic Press.

Kendall, P. C., & Hollon, S. D. (1979). *Cognitive-behavioral intervention: Theory, research and procedures*. New York: Academic Press.

Kendall, P. C., & Wilcox, L. E. (1980). Cognitive-behavioral treatment of impulsivity: Concrete versus conceptual training in non-self-controlled problem children. *Journal of Consulting and Clinical Psychology*, 48, 80-91.

Kihlstrom, J. F., & Nasby, W. (1981). Cognitive tasks in clinical assessment: An exercise in applied psychology. In P. C. Kendall & S. D. Hollon (Eds.), *Assessment strategies for cognitive-behavioral interventions* (pp. 287-317). New York: Academic Press.

Klein, G. S. (1951). The personal world through perception. In R. R. Blake & G. V. Ramsey (Eds.), *Perception: An approach to personality* (pp. 328-355). New York: Ronald Press.

Klein, G. S. (1954). Need and regulation. In M. R. Jones (Ed.), *Nebraska symposium on motivation* (Vol. 2, pp. 224-274). Lincoln: University of Nebraska Press.

Klein, G. S. (1970). *Perception, motives and personality.* New York: Knopf.

Klein, G. S., & Schlesinger, H. J. (1949). Where is the perceiver in perceptual theory? *Journal of Personality*, 18, 32-47.

Kogan, N. (1976). *Cognitive styles in infancy and early childhood.* Hillsdale, NJ: Lawrence Erlbaum.

Lazarus, R. S. (1980). Cognitive behavior therapy as psychodynamics revisited. In M. J. Mahoney (Ed.), *Psychotherapy process: Current issues and future directions* (pp. 121-126). New York: Plenum Press.

Leuner, H., Horn, G., & Klessmann, E. (1983). *Guided affective imagery with children and adolescents.* New York: Plenum Press.

Magnusson, D. (1981). *Toward a psychology of situations.* Hillsdale, NJ: Lawrence Erlbaum.

Mahoney, M. J. (1977). Reflections on the cognitive learning trend in psychotherapy. *American Psychologist*, 32, 5-13.

Mahoney, M. J. (Ed.). (1980). *Psychotherapy process: Current issues and future directions*. New York: Plenum Press.

Mahoney, M. J., & Arnkoff, D. B. (1978). Cognitive and self-control therapies. In S. Garfield & A. Bergin (Eds.), *Handbook of psychotherapy and behavior change* (2nd ed., pp. 689-722). New York: Wiley.

Marmor, M., & Woods, S. M. (Eds.). (1980). *The interface between psychodynamic and behavioral therapies.* New York: Plenum Press.

Meichenbaum, D. (1977). Cognitive-behavior modification: An integrative approach. New York: Plenum Press.

Mounoud, P. (1982). Revolutionary periods in early development. In T. G. Bever (Ed.), *Regressions*

in mental development (pp. 119-132). Hillsdale, NJ: Lawrence Erlbaum.

Ortony, A. (1975). Why metaphors are necessary and not just nice. *Educational Review,* 25, 45-53.

Ortony, A. (Ed.). (1979). *Metaphor and thought.* New York: Cambridge University Press.

Ortony, A., Reynolds, R. E., & Arter, J. A. (1978). Metaphors: Theoretical and empirical research. *Psychological Bulletin*, 85, 919-943.

Paivio, A. (1971). *Imagery and verbal processes.* New York: Holt.

Piaget, J. (1977). The role of action in the development of thinking. In W. F. Overton & J. M. Gallagher (Eds.), *Knowledge and development* (Vol. 1, pp. 17-42). New York: Plenum Press.

Rees, K. (1978). The child's understanding of the past. *Psychoanalytic Study of the Child,* 33, 237-259.

Reese, H. W., & Overton, W. F. (1970). Models of development and theories of development. In L. R. Goulet & P. B. Baltes (Eds.), *Life-span developmental psychology* (pp. 116-149). New York: Academic Press.

Ritvo, S. (1978). The psychoanalytic process in childhood. *Psychoanalytic Study of the Child,* 33, 295-305.

Sander, L. W. (1962). Issues in early mother-child interaction. *Journal of American Academy of Child Psychiatry*, 1, 141-166.

Sander, L. W. (1964). Adaptive relationships in early mother-child interaction. *Journal of American Academy of Child Psychiatry*, 3, 231-264.

Sander, L. W. (1976). Infant and caretaking environment. In E. J. Anthony (Ed.), *Explorations in child psychiatry.* New York: Plenum Press.

Santostefano, S. (1967). *Training in attention and concentration: A program of cognitive development for children*. Philadelphia: Educational Research Associates.

Santostefano, S. (1969a, December). *Clinical education and psychoanalytic cognitive theory: A structure-oriented approach to assessing and treating cognitive disabilities in children*. Paper presented at the meeting of the American Association of the Advancement of Science, Chicago, IL.

Santostefano, S. (1969b). Cognitive controls versus cognitive styles: An approach to diagnosing and treating cognitive disabilities in children. *Seminars in Psychiatry*, 1, 291-317.

Santostefano, S. (1977a). Action, fantasy, and language: Developmental levels of ego organization in communicating drives and affects. In N. Freedman & S. Grand (Eds.), *Communicative structures and psychic structures* (pp. 331-354). New York: Plenum Press.

Santostefano, S. (1977b). New views of motivation and cognition in psychoanalytic theory: The horse (id) and rider (ego) revisited. *McLean Hospital Journal*, 2, 48-64.

Santostefano, S. (1978). *A bio-developmental approach to clinical child psychology: Cognitive controls and cognitive control therapy*. New York: Wiley.

Santostefano, S. (1980). Cognition in personality and the treatment process: A psychoanalytic view. *Psychoanalytic Study of the Child*, 35, 41-66.

Santostefano, S. (1984). Cognitive control therapy with children: Rationale and technique. *Psychotherapy*, 21, 76-91.

Santostefano, S. (in press a). Cognitive controls, metaphors and contexts: An approach to cognition and emotion. In D. Bearison & H. Zimiles (Eds.), *Thinking and emotions.*

Santostefano, S. (in press b). Metaphor: An integration of action, fantasy, and language in development. *Imagination, Cognition, and Personality.*

Santostefano, S., & Reider, C. (1984). Cognitive controls and aggression in children: The concept of cognitive-affective balance. *Journal of Consulting and Clinical Psychology*, 52, 46-56.

Shapiro, I. F. (1972). Cognitive controls and adaptation in children (Doctoral dissertation, Boston

College, 1972). *Dissertation Abstracts International,* 33, 1780B.

Smith, N. R., & Franklin, M. B. (Eds.). (1979). *Symbolic functioning in childhood.* Hillsdale, NJ: Lawrence Erlbaum.

Sollod, R. N., & Wachtell, P. L. (1980). A structural and transactional approach to cognition in clinical problems. In M. J. Mahoney (Ed.), *Psychotherapy process: Current issues and future directions* (pp. 1-27). New York: Plenum Press.

Szasz, T. S. (1967). Behavior therapy and psychoanalysis. *Medical Opinion Review*, 2, 24-29.

Wachtel, P. L. (1977). *Psychoanalysis and behavior therapy: Toward an integration*. New York: Basic Books.

Wachtel, P. L. (Ed.). (1982). *Resistance: Psychodynamic and behavioral approaches.* New York: Plenum Press.

Weiner, M. L. (1975). *The cognitive unconscious: A Piagetian approach to psychotherapy.* New York: International Psychological Press.

Wertlieb, D. L. (1979). Cognitive organization, regulations of aggression and learning disorders in boys. Unpublished doctoral dissertation, Boston University.

Winner, E., Wapner, W., Cicone, M., & Gardner, H. (1979). Measures of metaphor. *New Directions for Child Development*, 6, 67-75.

Wolf, D., & Gardner, H. (1979). Style and sequence in early symbolic play. In N. R. Smith & M. B. Franklin (Eds.), *Symbolic functioning in childhood* (pp. 117-138). Hillsdale, NJ: Lawrence Erlbaum.

Wolff, P. H. (1960). The developmental psychologies of Jean Piaget and psychoanalysis. *Psychological Issues* (5). New York: International Universities Press.

Zimmerman, B. J. (1983). Social learning theory: A contextualist account of cognitive functioning. In C. J. Brainerd (Ed.), *Recent advances in cognitive-developmental theory* (pp. 1-50). New York: Springer-Verlag.