The Therapist With the Three-Track Mind

Maureen Hayes Fleming

Key Words: problem solving

This article reports some of the results of the American Occupational Therapy Association/American Occupational Therapy Foundation Clinical Reasoning Study. Therapists are thought to use three different types of reasoning when solving problems in day-to-day practice. Procedural reasoning guides the therapist in thinking about the patient's physical performance problems. Interactive reasoning is used when the therapist wants to understand the patient as a person. Conditional reasoning is used to integrate the other two types of reasoning as well as to project an imagined future condition or situation for the person. Experienced occupational therapists seem to shift smoothly from one mode of thinking to another in order to analyze, interpret, and resolve various types of clinical problems.

The primary purpose of the American Occupational Therapy Association/American Occupational Therapy Foundation Clinical Reasoning Study was to identify the reasoning strategy that occupational therapists used to guide their practice. The designers of this study assumed that there was one reasoning style that is typical of clinical reasoning in occupational therapy. They decided that ethnography was the research method (Gillette & Mattingly, 1987) most likely to enable them to identify this typical or best reasoning style. However, as investigators, Mattingly and I soon realized that the occupational therapists in the study employed a variety of reasoning strategies. During the early stages of the research project, when we were still searching for a single reasoning style, the apparent use of several forms of reasoning led us to believe that the therapists' thinking was inconsistent or scattered. Further analysis of the videotapes of treatment sessions, interviews, and group discussions with the therapist-subjects gave us deeper insight into their reasoning processes. They employed different modes of thinking for different purposes or in response to particular features of the clinical problem. The occupational therapists in the study seemed to use at least four different types of reasoning: narrative reasoning (Mattingly, 1989, 1991), procedural reasoning, interactive reasoning, and conditional reasoning (Fleming, 1989). These last three types of reasoning are discussed in the present article.

Another insight was that each type of reasoning seemed to be employed to address different aspects of the whole problem. Eventually, we realized that the therapist-subjects attended to the patient at three levels: (a) the physical ailment, (b) the patient as a person, and (c) the person as a social being in the context of family, environment, and culture. We then saw that each type of reasoning was employed to address a particular level of concern. The procedural reasoning strategy was used when the therapist thought about the person's physical ailments and what procedures were appropriate to alleviate them. Interactive reasoning was used to help the therapist interact with and understand the person better. Conditional reasoning, a complex form of social reasoning, was used to help the patient in the difficult process of reconstructing a life now permanently changed by injury or disease.

These three reasoning strategies appeared to be distinctly different, yet the therapist-subjects seemed to shift rapidly from one form of reasoning to another. They changed reasoning styles as their attention was drawn from the original concern to treat the physical ailment to other features of the problem, such as the particular person's response to the present activity. Using procedural reasoning, the therapist-subjects readily moved back to the physical problem that they had been pursuing earlier. They analyzed different aspects of the problem simultaneously. They used different thinking styles without los-
ing track of some aspects of the problem while they temporarily shifted attention to another feature of the problem. We began to think about these styles of reasoning as different operations that interacted with each other in the therapist's mind. We referred to these operations as different tracks for guiding thinking. Thus, we developed the notion of the occupational therapist as a therapist with a three-track mind. The track analogy helped us envision how a therapist thought about the multiple and diverse issues that pertained to the patient's problems and the therapist's ability to influence them.

**Procedural Reasoning**

The therapist-subjects used what we called *procedural reasoning* when they were thinking about the disease or disability and deciding on which treatment activities (procedures) they might employ to remediate the person's functional performance problems. In this mode, the therapists' dual search was for problem definition and treatment selection. In situations where problem identification and treatment selection were seen as the central task, the therapists' thinking strategies demonstrated many parallels to the patterns identified by other researchers interested in problem solving in general and clinical problem solving in particular (Coughlin & Patel, 1987; Elstein, Shulman, & Sprafka, 1978; Newell & Simon, 1972; Rogers & Masagatani, 1982). The problem-solving sequence of diagnosis, prognosis, and prescription, which is typical of physicians' reasoning, was commonly used. However, the words the therapists used to describe this sequence were *problem identification, goal setting, and treatment planning*.

Experienced therapists in the study used forms of reasoning similar to the problem-solving strategies identified by many investigators who study physicians. For example, therapists used all three problem-solving methods described by Newell and Simon (1972)—recognition, generation and testing, and heuristic search. They also displayed characteristics identified by Elstein et al. (1978), such as cue identification, hypothesis generation, cue interpretation, and hypothesis evaluation. They interpreted patterns of cues, much like the ones that Coughlin and Patel (1987) identified among physicians and medical students. The structural features of the hypotheses generated by the therapists were similar to those of medical students in a study by Allal (as cited by Elstein et al., 1978), that is, hierarchical organization, competing formulations, multiple subspaces, and functional relationships.

One characteristic of reasoning common to all of the physicians and medical students in the studies by Elstein et al. (1978) was generation and evaluation of competing hypotheses. Physicians always looked for more than one potential cause of the problem presented. They devoted a considerable portion of their reasoning efforts to seeking additional cues and rearranging hypotheses in their minds in order to either support or negate more than one possible cause of the presenting ailment. Competing hypothesis generation was also a strategy commonly used by the occupational therapists. The experienced therapists in this study typically generated two to four possible hypotheses regarding the cause and nature of aspects of the person's problem. They generated several hypotheses about potential treatment activities as well. However, there was a tendency among the newer therapists to seek the right answer rather than to generate hypotheses about possibilities. When they generated hypotheses, they tended to consider only one or two of them.

Elstein et al. (1978) noticed a phenomenon that they referred to as *early hypothesis generation*, which they interpreted as being an attempt on the part of the physician to define, or mentally enter, the appropriate problem space, as theorized by Newell and Simon (1972). Newell and Simon hypothesized that abstract thinkers categorized problems or phenomena in different spaces or areas of the possible source of the problem or avenue of inquiry. A similar notion was advanced by Feinstein (1973), who suggested that physicians' thinking would be improved if they systematically searched for sources of the problem using a reverse hierarchical method. Using this method, physicians would think of what area of the body was involved, then what system, then what organ, then what process, until the problem space was sufficiently defined and specific problems could be identified. Experienced therapists seemed to quickly identify and search within the appropriate problem spaces. Novice therapists had more difficulty with this task.

It makes sense that occupational therapists who work in a medical center, as did the subjects in the Clinical Reasoning Study, and for whom part of their education contained long hours of medical lectures, would use a thinking style similar to that used in medical decision making. That therapists frequently used these logical reasoning styles was expected. However, it was surprising that therapists often did not use these styles. This phenomenon led us to search for other modes of thought that the therapist-subjects might be using.

In discussions with the therapists, a few persistent themes emerged. At first, these themes did not seem to be explicitly linked to clinical reasoning. Some seemed to be distractions from discussing reasoning. Later, we found that these seeming distractions were important to the therapists' thinking about clinical problems. Our misunderstanding of these possible distractions was a result of our initial failure to recognize that therapists viewed clinical problems from more than one perspective. After examining these perspectives, we achieved a greater understanding of how therapists think in general and how they think differently about different aspects of the patient's situation.

We were able to identify these perspectives by ana-
lyzing several of the persistent themes that flowed through the therapists’ conversations. One such theme was that the therapist-subjects often questioned what aspects of the person and the disability were appropriate for them to treat. In one group discussion, we were analyzing a videotape in which a therapist was attempting to encourage an outpatient to solve a problem. The personal care attendants he hired all quit after only a few weeks of working with him. The therapist was unable to convince the patient that this was a problem. He engaged in a wide range of what therapists referred to as avoidance tactics. Clearly the therapist and the patient had differing points of view on this issue. As the problem was discussed, many therapists in the group interpreted it as a value conflict between the patient and the therapist. There were at least two value conflicts here. One was that the therapist thought it was unsafe for the patient to live alone without someone to assist him in accessing the bed, the tub, the toilet, or his wheelchair. The patient had fallen many times while attempting these moves by himself, and his solution was to call the fire department in his small town and have someone come to his house and pick him up. The patient viewed this as a simple solution, whereas the therapist viewed it as poor judgment and irresponsibility. Another conflict was that the therapist believed that the patient should keep himself and his home cleaner. The patient did not agree with this. The group of therapists focused on whether the therapist should have pursued the discussion. The concern was whether or not the therapist, who specialized in treating physical disabilities, should have been discussing personal issues with the patient. Some group members believed that discussions of personal issues were under the aegis of psychiatric therapists only. A therapist who worked in a psychiatric setting then said that in her hospital, occupational therapists were not supposed to discuss personal issues; only psychiatrists were to discuss personal issues. In her setting, therapists could only discuss observable behaviors and relate them back to possible implications for such concerns as how one behaves at work. The discussion became more intense regarding the role of the different types of occupational therapists and what they could and could not do or discuss with their patients. It was clear that the group members had different opinions regarding the appropriate depth and range of their interaction with patients. This difference was not divided along specialty lines. One therapist said, “Well, I work in physical disabilities and I talk about all sorts of things with my patients.” Others confirmed her position. The therapists were not in agreement regarding their role in discussing the more personal issues and what they considered to be intimate or embarrassing aspects of the person’s thoughts, feelings, bodily functions, or history. Some believed that therapists should treat the whole person. However, others believed that their role was to treat only the physical aspects of the person’s disability or functional limitation. Still other therapists were undecided about their stance on these issues.

A related issue came up weeks later in a discussion group with experienced therapists. Their concern was to identify exactly what constitutes treatment. They wanted to define which of the therapist’s actions were part of the therapeutic process and which were not. These therapists were generally comfortable with the notion of treating the whole patient, but they were not sure whether their conversations with patients were part of the treatment. Because the therapists in this particular hospital tended to see patients on a fairly long-term basis, they knew the patients as individuals quite well. There seemed to be confusion regarding whether the therapist’s understanding of the individual person and his or her concerns was part of therapy or simply an artifact of the therapist’s personality. Some therapists felt strongly that the relationship with the patient was an essential element of the therapy. Others saw it as an adjunct to therapy. Still others saw it as not a part of therapy. Some believed that personal discussions were inappropriate.

It seemed that these two related issues of what aspects of the person an occupational therapist treats and what actions of the occupational therapist constitute the therapeutic process were sources of conflict for the therapists. There were two types of conflict. The opinion held by some therapists that occupational therapists should treat the whole person conflicted with the opinion that therapists should treat only the physical problems. Another conflict was that some therapists were uncertain about which of these two points of view or perspectives was the right one. This conflict seemed to be created, at least in part, by a perceived conflict between the medical model perspective and the humanistic perspective.

Therapists who had strong beliefs that their relationship with patients was an effective part of therapy thought that those beliefs were in conflict with the perspective of the medical setting. Issues such as what constitutes therapy, the role of the therapist, turf boundaries, and the necessity for scientific evidence as a validation of practice all served to deny or devalue the importance of therapists’ concerns for the patient as a person. This feeling was so pervasive that some therapists had difficulty appreciating the depth and complexity of their practice. They seemed confused and wondered whether they should accept their own interpretations of their practice or the interpretations of individuals and groups around them. The discussions were full of comments like the following:

Well, I know I was supposed to be teaching the lady bathing techniques. After all, that’s my job—that’s what I get paid for. But she really wanted to talk to me about her grandchild. So I did and she felt better and we understood each other better. Besides, what was I going to say? "Don’t talk to me while you take a bath?" She has been much better at learning the bathing since that session, by the way. Of course, I put on the chart, “bathing training,” but I sort of felt guilty even though I know I did the right
thing. I know I wasn’t wasting time chatting, but it could have looked that way.

The therapists believed that the physicians, administrators, and especially the insurance companies did not value their interactions with patients. They further believed that these various authorities would criticize them for interacting with patients and taking time away from what the authorities considered the real treatment. It soon became clear that those therapists who valued their relationship with the patient persisted in interacting with them as people regardless of the requirements of the hospital and reimbursement agencies. Therapists talked to, listened to, understood, and were respected by their patients. Therapists and patients valued these interactions. Most therapists valued interacting with patients but did not report talking with patients.

This process of conducting essentially two types of practice, one focused on the procedural treatment of the person’s physical body and the other focused on the phenomenological person as an individual, is discussed in this issue by Mattingly (1991). The point here is that while two practices were conducted, only one was reported—the procedural practice. The interactive practice, which was the unreported practice, we called the underground practice. Later, we saw that although often under-ground, this sort of practice was important both to patients and therapists. It also had a logic or reasoning strategy of its own and a particular ways of guiding therapists’ thoughts and actions. We called this interactive reasoning.

Interactive Reasoning

Interactive reasoning took place during face-to-face encounters between the therapist and the patient. It was the form of reasoning that therapists employed when they wanted to understand the patient as an individual. There were many reasons why a therapist might want to know the person better. The therapist might want to know how the person felt about the treatment at the moment or what the patient was like as a person, either out of sheer interest or in order to more finely tailor the treatment to his or her specific needs or preferences. Further, the therapist might be interested in this patient in order to better understand the experience of the disability from the person’s own point of view. This is what Kleinman (1980) called the illness perspective, as contrasted with the disease perspective. The therapists wanted to know what the illness experience was like for a person. They wanted to understand the patients from their own point of view. Interactive reasoning occurred when therapists took the phenomenological perspective (Kestenbaum, 1982), although the therapists did not typically use that term to explain a shift to the humanistic point of view.

Several people have been interested in the clinical reasoning study and have analyzed various videotapes made during the data-gathering stage. Some have examined different aspects of interactive reasoning. The depth of these analyses is impressive, as is the complexity of the interactive reasoning strategies discovered. A compilation of those analyses shows us that therapists appeared to employ interactive reasoning for at least eight reasons or purposes, as follows:

1. To engage the person in the treatment session (Mattingly, 1989, identified six such strategies).
2. To know the person as a person (Cohn, 1989).
3. To understand a disability from the patient’s point of view (Mattingly, 1989).
4. To finely match the treatment goals and strategies to this patient with this disability and this experience. Therapists call this process individualizing treatment (Fleming, 1989).
5. To communicate a sense of acceptance, trust, or hope to the patient (Langthaler, 1990).
6. To use humor to relieve tension (Siegle, 1987).
8. To determine if the treatment session is going well (Fleming, 1990).

It seems that although the therapists did not initially recognize interaction and interactive reasoning as central to their practice, they used it at least as an adjunct to practice on many occasions for various reasons. Perhaps particular interactive strategies were used for particular therapeutic reasons. Some of the reasoning styles or strategies identified and the hypothesized reasons for their use are similar to new concepts about reasoning that have been proposed by various psychologists and philosophers. Gardner (1985), for example, proposed that there are many useful ways to think and that hypothetical deductive reasoning is not necessarily the only, or even the best, way to think. Many forms of reasoning have been suggested by investigators who study how persons think about themselves and their experience within the cultural context (Berger & Luckman, 1967; Bruner, 1986, 1990). Many are concerned with how such elusive processes as values, norms (Perry, 1979), and symbolic meanings (Koestler, 1948) are used to guide, gauge, frame, and formulate thought and action (Bernstein, 1971; Dreyfus & Dreyfus, 1986; Geertz, 1983; Schön, 1983). Others examine properties of problems and relate them to particular problem-solving strategies. Some propose that features of the problem will influence individuals and, in effect, direct them to select a particular problem-solving method. Such features may include salient characteristics of a task or problem (Hammond, 1988), the context (Greeno, 1989), individual interests and talents (Gardner, 1985), or experience (Dewey, 1915).

The notion that characteristics of the presumed problem will prompt a particular thinking process seemed to be borne out in our observations of the thera-
pists in the clinical reasoning study. The therapists shifted from one form of thinking to another. They often noted subtle cues and responded to them rapidly, then returned to another task and thinking mode without "skipping a beat," as one observer commented.

If such numerous reasoning strategies exist, and if the therapists had different purposes in mind for using interaction as a therapeutic medium, then it also seems likely that the purpose of the interaction would prompt the use of a particular reasoning strategy. For example, in trying to understand the person as a person, therapists' reasoning resembled what Belenky, Clinchy, Goldberger, and Tarule (1986) described as connected knowing, which they linked to empathy. In trying to understand the disability from the patient's point of view, therapists used a phenomenological approach similar to that advocated by Paget (1988). Therapists' interactions with patients created an understanding of the person as an individual within a culturally constructed point of view, or what Schutz (1975) called a reciprocity of motives.

When individualizing treatment, therapists appeared to be functioning intuitively rather than analytically. Hammond (1988) proposed, however, that intuitive reasoning is as effective and complex as analytical reasoning. Intuitive reasoning is employed in response to problems that are not well defined. Tasks in which there are many cues from several sources and that require perceptual rather than instrumental measurement, Hammond argued, induce the person to use intuitive methods of problem solving. He further asserted that in these situations, analytical reasoning would be less effective than intuitive reasoning.

The interactive reasoning strategies that Mattingly (1989) identified indicate that therapists use several ways to engage the patient in treatment. To be effective, some of these strategies require complex interpretations of subtle interactive cues. The 23 interactive strategies that one therapist used in treatment, which were identified by Langthaler (1990), seem to suggest that the therapist was partially influenced by psychoanalytic theorists such as Rogers (1961) and occupational therapy theorists such as Fidler and Fidler (1963) and Mosey (1970). This finding is not surprising, because occupational therapy students are required to read the works of these theorists. The complexity, subtlety, and facility with which some therapists used numerous interaction forms, however, suggest processes far more complex than could be accounted for by professional education alone.

We also had a strong sense that the therapists' reasoning about and interaction with patients was directly related to their values. Their sense of the importance of patients as individuals leads one to draw parallels to beliefs about ethical and moral decision making, such as those expressed by Gilligan (1982), Kegan (1982), and Perry (1979). The task of monitoring the patient's feelings about the treatment and yet managing that treatment, which is often difficult and sometimes painful or distasteful, seems to require a considerable amount of what Gardner (1985) referred to as *interpersonal intelligence*. Gardner postulated two kinds of interpersonal intelligence: "The capacity to access one's own feeling life" and the "ability to notice and make distinctions among other individuals in particular among their moods, temperaments, motivations and intentions" (p. 239). Interactive reasoning requires active judgment (Buchler, 1955) on several levels simultaneously. This requires that the therapist analyze cues from the patient, transmit his or her interpretation of the patient, and interpret the patient's interpretations of the therapist's interpretations quickly and accurately. This reciprocal process is one that Erikson (1968) considered essential to identity formation and future social interaction capabilities. Possibly, the therapist's ability to interact successfully and therapeutically is strongly linked to his or her personal and professional identity. Gardner hypothesized that interpersonal intelligence is based on a well-developed sense of self. Certainly it is linked to professional self-confidence. Novice therapists reported that in their first year of practice they did not have the confidence, nor did they believe they had the right, to interact with patients as individuals. They reported that they "stuck to the procedural" until they were confident in their use of those skills. We observed therapists even in the second year of practice going back and forth between the procedural and interactive modes of treating their patients. In the experienced senior therapists, procedural and interactive forms seemed to flow together, each enhancing the other.

We therefore found that interaction, which at first seemed like a distraction from treatment or, at best, an adjunct to it, was a necessary and legitimate form of therapy. Interactive reasoning was used effectively by most therapists to guide this aspect of their treatment. It appears that procedural reasoning guides treatment and interactive reasoning guides therapy. Although interactive reasoning is far less easy to map than procedural reasoning, we will continue to make observations and develop theory in this area.

### Conditional Reasoning

The concept of conditional reasoning is perhaps the most elusive notion in our proposed theory of a three-track mind. Yet we are firmly, if intuitively, convinced that there is a third form of reasoning that many therapists used. This reasoning style moves beyond specific concerns about the person and the physical problems placed on them to broader social and temporal contexts. The term *conditional* was used in three different ways. First, the therapist thought about the whole condition, which involved the person, the illness, the meanings the illness had for the person, the family, and the social and physical contexts in which the person lived. Second, the therapist...
needed to imagine how the condition could change. The imagined new state was a conditional (i.e., temporary) state that might or might not be achieved. Third, the success or failure of treatment was contingent on the patient’s participation. The patient must participate not only in the therapeutic activities themselves, but also in the construction of the image of the possible outcome, that is, the revised condition.

Conditional reasoning seems to be a multidimensional process involving complicated, but not strictly logical, forms of thinking. In using conditional reasoning, the therapist appears to reflect on the success or failure of the clinical encounter from both the procedural and interactive standpoints and attempts to integrate the two. Thinking then moves beyond those immediate concerns to a deeper level of interpretation of the whole problem. The therapist interprets the meaning of therapy in the context of a possible future for the person. The therapist imagines what that future would be like. This imagined future is a guide to bringing about a revised condition through therapy. This thinking process is essentially imagination tempered by clinical experience and expertise.

The therapists tried to imagine what the person was like before the injury. Similarly, they tried to estimate or imagine what the possibilities were for the person’s future life. By imagining, therapists mentally placed the person in contexts of current, past, and future social worlds. The therapists used imagination in order to best match the treatment selections to the specific interests, capacities, and goals of the person. Thus, the therapists were able to make their current treatment relevant to the individual patient. The present treatment, therefore, was not simply a link to future performance, but also, was imagined within the context of a life in process.

Perhaps this form of reasoning is best described by an example. Cathy, a pediatric therapist, was the most articulate about using this form of reasoning. Cathy usually treated very young children who lived in the community and had come to an outpatient early intervention program. The child’s mother or guardian was usually present, and Cathy invariably included the mother in the session. The mother might be enlisted to hold the baby in an advantageous position or to help sustain the child’s interest. Cathy would often talk to the mother while simultaneously working with the child. She often asked questions like, “Does he do this at home?” “Does he usually cry in this sort of situation?” “What does he like to do?” “Does he have difficulty calming himself down?” These were not diagnostic history-taking questions in the medical procedural sense. Cathy said she asked these questions to construct an image of what the child was really like on a day-to-day basis. She told us that she used this image to structure her treatment and imagine possible goals for the child. As she said,

I see this little child and his movement patterns and his difficulties, and then I imagine what he will be like in 2 years and then when he is 5 [years old] and maybe going to school. I think of what I can do to help him develop the skills that he will need to function in school and in the community and what he will be like and how his family will be with him.

Here Cathy describes a process of imagining and integrating images of the past, present, and future for this child given the variables of the child himself, his developmental delays and disabilities, his family situation, the social and educational opportunities available to him, what he might be able to do in the future, and how she might enable that future condition to come about.

Clearly, it takes professional experience to be able to project the possible developmental pattern and potential rate of success in attaining a future developmental level. It also requires a mind that is imaginative, curious, and interested in future possibilities. Conditional reasoning involves a way of thinking that may include a systems perspective and that extends to the future (Mattingly, 1989), yet it moves beyond this perspective to an analysis of present interactions (Kleinhofner, 1978; Mattingly, 1989), so that one can envision how these interactions might help create a better life for the child.

Having constructed these images, which changed slightly over time and throughout the course of treatment, the therapists used images as a way of interpreting the importance of the patient’s treatment. Therapists would mentally compare the patient’s abilities today and the relative success of today’s treatment session against images of what the person was like before. They also compared where the patient was today to where they wanted the patient to be in the future. Each therapist would envision the patient today and estimate how close that was to where he or she thought the patient should be at this point in the course of treatment. They would mentally check to see how far the patient had come toward attaining the future the therapist had in mind. The evaluation of today’s treatment was made in the context of past and future possibilities. Therefore, the particular state of things today would serve as a mental mile marker for indicating progress toward a distant, and perhaps only dimly perceived, future.

One reason that we called this conditional reasoning was because a change in the present condition was conditional on the therapist’s and the patient’s participation in effective therapy. This condition was dependent not only on the therapist’s ability to engage the patient in treatment in the sense discussed in the interactive section, but also on building a shared image of the person’s future self. This image building was often accomplished through stories or narrative, as described by Mattingly (1991). However, in many aspects of therapeutic interaction, the images that the therapists helped to build were often based in action. Pediatric therapists often included the mother in creating a mental image of the child in the future. This image was projected into the distant future, such as when a therapist wondered what an infant she
was treating would be like in school several years later. Therapists projected images into the near future as well. They also used images as a way of extending therapy into the home setting. Cathy said to the child's mother, "Would he do this at home? Could he just sit quietly and look at something and have this nice position? Could the kids maybe hold him like I am doing while they watch TV?" Here she created a visual image, based on action in the present, of the child in a near-future situation. This was done not only to enhance the therapy, but also to build an image of the child as a participant in the family, rather than just as a disabled baby.

One technique for conveying these images that therapists often used was to tell patients that they were getting better and to produce evidence of this by saying such things as, "Remember when you could not do this? Now you can." Sometimes the therapists would also use this technique for themselves. Therapists commented that when they were discouraged with a patient's progress, they found it helpful to remind themselves of how far the patient had come. This technique helped both the patient and the therapist focus on the importance of their joint participation in this enterprise of treatment. It helped them through difficult, frustrating, and boring times and allowed them to place the moment in a more positive, though abstract and distant, context. Most importantly, it seemed to remind them that the condition was changing. Such changes were often quantitative, such as increased range of motion, and would be noted in the person's chart. But qualitative changes and their meanings were equally important to therapists and patients. Although these changes were not reported in the patient's chart, they did indicate progress toward that shared future image that the therapist and patient jointly constructed and worked toward. Meaningful progress was best measured through the therapist's and patient's collective memory. Therapists were not simply saying, "This is progress. Remember how bad things were before?" Instead, they were saying, "If you have come this far, maybe we will get to where you imagined you would be, even though you are discouraged today."

Putting It All Together: Treating the Whole Person

The therapists in the Clinical Reasoning Study often used two phrases to describe their treatment—putting it all together and treating the whole person. Treating the whole person did not mean that the therapists were in charge of the patient's whole medical and psychological treatment. In fact, in the traditional medical sense of the word treatment, occupational therapists are peripheral to the patient's treatment. The phrase was intended to convey the belief that therapists concern themselves with the patient as a person, that is, as an individual with many facets, interests, and concerns. By saying that they treat the whole person, therapists mean that they treat the person as a whole, not as the sum of ill and healthy parts.

The phrase putting it all together seemed to mean that although the therapists often had to think only about the disability or only of the individual patient at a given moment, they were concerned that they eventually thought and did something about the patient as a whole person, that is, person, illness, and condition. Although they used several types of reasoning and addressed several different types of concerns, therapists always wanted their reasoning to track back to making a better life for the patient as a person. Their ultimate goal was to use as many strategies as necessary to improve the individual functional performance of the person. Because functional performance requires intentionality, physical action, and social meaning, it is not surprising that persons who concern themselves with enabling function would have to address problems of the person's sense of self and future, the physical body, and meanings and social and cultural contexts—contexts in which actions are taken and meanings are made. Because these areas of inquiry are typically guided by different types of thinking, it seems necessary that therapists become facile in thinking about different aspects of human beings using various styles of reasoning. Perhaps these multiple ways of thinking guide the therapists in accomplishing and evaluating the mysterious process of "putting it all together" for the person. This process, which enables the whole person to function as a new self in the future, seemed to be guided by a complex yet unidentified form of reasoning that was both directed and conditional.

Conclusion

The Clinical Reasoning Study showed that therapists use several different types of reasoning to solve problems and to design and conduct therapeutic processes. Further, the particular reasoning processes are selected to guide inquiry into different aspects of the person's problem or of the therapist's intervention. As part of this research process, we developed a theory about these reasoning processes and constructed concepts to which we added terminology in order to discuss these concepts among ourselves and with the therapists. Thus, we referred to the type of reasoning that was used to guide those aspects of practice that are concerned with the treatment of the patient's physical ailment as procedural reasoning. Interactive reasoning, we propose, is a type of reasoning that therapists used to guide their interactions with the person. Conditional reasoning is both an imaginative and an integrative form of reasoning that the more proficient therapists used to think about the patient and his or her future, given the constraints of the physical condition within the patient's personal and social context. The therapists who were part of this study confirmed our assumptions that they use different forms of reasoning.
for different parts of the problem and found these concepts and terms useful in understanding and explaining their reasoning and practice.

References


