CASE REPORT

The Clinical Reasoning of an Occupational Therapy Assistant

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This qualitative case study focused on the clinical reasoning of a certified occupational therapy assistant who had 16 years of practice experience. Observation and interview methods were used to collect data. Transcripts and field notes were coded using a priori codes of the forms of clinical reasoning of occupational therapists identified in published research. The study participant demonstrated the use of pragmatic, procedural, interactive, conditional, and narrative reasoning. We encourage further research to support these findings and to increase the understanding of the forms of clinical reasoning used by occupational therapy assistants.


A growing body of literature explores the clinical reasoning of occupational therapists (Mattingly & Fleming, 1994; Rogers, 1983; Schell & Cervero, 1993). This literature, however, does not address the clinical reasoning of occupational therapy assistants. Targeting this gap in the research, I, the first author, conducted a qualitative case study using methods of interview and observation to explore the clinical reasoning of an occupational therapy assistant. I describe in this article only the analysis during which I coded the interview transcripts and observation field notes using the a priori codes of the forms of clinical reasoning of occupational therapists previously identified in the literature (Mattingly & Fleming, 1994; Schell & Cervero, 1993).

Method

Participant

A case study can illuminate complexities that warrant further exploration (Stake, 2000) and is, therefore, an appropriate method for topics about which little research has been done. To choose a participant for this study, I needed to identify a case that offered an intense experience for learning about my specific focus of interest (Stake, 2000). Because I wanted to find an occupational therapy assistant whose job description demanded clinical reasoning, the first selection criterion was that he or she engage clients in direct occupational therapy intervention and is able to recognize factors that warrant modification and discontinuation of the intervention plan. The assistant had to be capable of reflecting on his or her practice and be open to in-depth observation and interviewing (Hycner, 1985). Operating under the untested assumption that an expert occupational therapy assistant would employ complex clinical reasoning skills, I wanted to find a person who exem-
Amy began her career in mental health, had held two administrative positions, and referred to her current practice in geriatrics as her “true love.” At the time of the study, Amy was a staff occupational therapy assistant working with older adults with physical dysfunction. The skilled nursing facility at which she worked was transitioning to the prospective payment system. Amy carried her own caseload and provided direct intervention, at times delegating tasks to a rehabilitation technician. Consistent with American Occupational Therapy Association (AOTA) recommendations for her level of experience, Amy was responsible for collecting data for evaluations when requested and implementing the occupational therapy program designed with her supervising therapist (AOTA, 1993, 1994). She met informally with the occupational therapist at the facility daily and formally once a week for supervision sessions. Amy described the formal sessions as “dynamic,” with both practitioners asking questions of each other or interjecting comments about their caseload.

Procedure

Over the course of 3 weeks, I spent three 8-hr workdays observing Amy at her workplace. Amy worked with 12 different clients during those observations, sometimes working with a particular client more than once a day. I observed Amy work with 3 clients three times, 7 clients twice, and 3 clients once.

In addition to observation, I conducted five interviews between 20 min and 90 min each with Amy. The first interview occurred at a quiet restaurant a few days before observations began. The interview was semistructured and focused on Amy’s career history, her personal philosophy of occupational therapy, and her current workplace. The second interview occurred on the morning of the second observation day before beginning observations. The third and fourth interviews occurred at Amy’s workplace immediately after the 2nd and 3rd observation days, respectfully. The fifth interview occurred 2 weeks after the observations while I was writing up the findings of this study.

During the interviews and periods of observations, when Amy was not in the presence of clients, I asked her to explain what she was doing and thinking and to provide reasons for her decisions and actions throughout the day. I took notes during the observations and wrote them out in narrative form at the end of each observation day. I audio-taped and transcribed the interviews.

Because I was exploring whether an occupational therapy assistant used the types of clinical reasoning already identified by other researchers, I coded the data to identify examples of procedural, interactive, conditional, narrative (Mattingly & Fleming, 1994), and pragmatic reasoning (Schell & Cervero, 1993). This a priori method is one way to analyze qualitative data (Miles & Huberman, 1994). For example, if Amy was trying to figure out the best way to schedule her day, I called that pragmatic reasoning.

During data analysis, I gave Amy drafts of the developing manuscript to read. Because Amy was unfamiliar with the literature about clinical reasoning, she could not confirm or refute my coding and categorizations of her thoughts, but she was able to offer clarification and tell me whether I portrayed the events and her thoughts accurately. This form of member checking (Lincoln & Guba, 1985) helped me to stay close to Amy’s articulated thoughts and not rely exclusively on my interpretation of her actions.

Findings

Pragmatic Reasoning

According to Schell and Cervero (1993), occupational therapists use pragmatic reasoning when they take into account the constraints and opportunities offered by the practice environment. Pragmatic reasoning reflects the logistics of practice (Neistadt, 1998). The space and materials available, financial obligations, the therapist’s personal values and style, time constraints, the organizational structure, and staffing realities all influence clinical decisions (Neistadt, 1998; Schell, 1998). Occupational therapy practitioners weigh and balance these factors as they attempt to meet a client’s needs within the boundaries of a particular delivery system (Schell, 1998).

Amy referred to pragmatic reasoning as “management reasoning,” and it consumed much of her energy as she became accustomed to a new reimbursement system with increased productivity expectations. The following illustrates her pragmatic reasoning:

I suppose this is clinical reasoning too, although I suppose it’s more of a management reasoning...you’ve got to figure out; okay, I’m in this room with this woman doing an ADL [activity of daily living], and I know I’ve got to leave a little sticky on the mirror with this one because [the] 11 to 7 [shift] usually does her [morning ADL]... if I don’t leave that there, they are going to do her tomorrow because they don’t look at the [scheduling] board. The only ones that look at the board are [the] 7 to 3 [shift]. So you’re a step ahead all the time. I have my stickies in my book...so when I’m with the lady and I know I’m going to do her tomorrow...I want to progress her to the next step for an ADL. Then the next day, I’ll see her for something else—home management or something—so I’ll put the sticky up now while I’m here so I don’t have to rush back at the end of the day from a different floor. So, constantly thinking like that.

Procedural Reasoning

One of the most tangible and accessible forms of clinical reasoning is procedural reasoning. Procedural reasoning is similar to the decision-making process used by other disciplines that follow the medical model. It allows therapists to identify problems and solutions in medical terms (Fleming, 1991). Occupational therapists use procedural reasoning to
reflect on the nature and implications of a disease and to explore options that might help to alleviate symptoms and improve occupational functioning (Mattingly & Fleming, 1994). To solve problems and plan intervention in this manner, therapists generate multiple hypotheses, attend to cues, and evaluate the validity of each hypothesis (Rogers, 1983; Rogers & Holm, 1991). The AOTA’s (1993) “Occupational Therapy Roles” document states that an intermediate-level occupational therapy assistant selects, adapts, and implements intervention under the supervision of an occupational therapist (p. 1090), implying that an intermediate-level occupational therapy assistant uses procedural reasoning.

Amy would get some ideas for intervention from her supervisor’s evaluations, but she often used procedural reasoning to help tailor the program to each client. She often individualized programs by introducing a variation of what her supervisor suggested. For example, Amy modified a visual scanning activity from looking for cones placed around the room to looking for books in the library. She did this because she believed that looking for books would be of greater interest to the client. Amy also introduced new tasks into the program. During the supervision session that I observed, Amy told her supervisor that she noticed some upper-extremity weakness in a client and had introduced some exercises that the client enjoyed. Amy then asked the supervisor to write a formal goal to address the problem.

Interactive Reasoning

Because each client has a unique occupational history and set of interests, therapy programs need to be individualized and specifically tailored (Clark, 1993; Gray, 1998). For intervention to be effective, the client must see how the therapy could be helpful to him or her and want to participate in the therapeutic program (Rogers, 1983). The mode of reasoning that occupational therapists use to discover what is important to and unique about a client is referred to as interactive reasoning (Mattingly & Fleming, 1994). Interactive reasoning occurs when therapists skillfully guide conversations to communicate trust, respect, and acceptance to the client. It also helps therapists come to know and understand clients in order to set goals and develop alliances. Interactive reasoning establishes the atmosphere that helps clients engage in the challenging work of occupational therapy (Mattingly & Fleming, 1994).

Like the occupational therapists in Mattingly and Fleming’s (1994) clinical reasoning study, Amy was sensitive to clients’ needs and dispositions and was able to change her therapeutic style as needed. I saw her use various therapeutic personas, and she was able to identify and describe these personas in an interview. She used therapy language with a physicist client who “thrive[d]” on learning the jargon of the field; she fluctuated between overt teaching and subtle cuing, depending on the goal and the client’s response; she was a “lab coat professional” when a client wanted to hear an authoritative opinion; she was warm to and hugged residents who live at the facility; and she was often a cheerleader for clients who need extra encouragement to struggle through a task. Amy varied her approach with each client on the basis of her impressions of how that client would respond.

During my first observation, Amy wanted to encourage a client to take a shower, so she told the woman that the shower would make her arm feel better. Then she said, “You and me, we’re the same. We both have that sore arm.” She later explained her rationale in this way:

I think Helen was a little down in the dumps, and I just had to perk her up and get her going. And the whole thing about “you and I are the same”...this is a bonding thing...when you’re working together with someone so they trust what you’re saying. Like, “She really does understand, she really does know what this is like, getting up in the morning with a sore arm.” Which is true. I wouldn’t say my arm is sore if it wasn’t. It just so happens I’ve been coping with that, and it’s the same arm. I know what you’re talking about. I know it stinks. It’s awful. So, I could do it. If it wasn’t that, like the last time I worked with her, I couldn’t [say that] because my arm didn’t hurt. So I would have had to think of something else.

Conditional Reasoning

Conditional reasoning is a complex and highly imaginative form of thought (Fleming, 1991; Mattingly & Fleming, 1994). Occupational therapists need to consider how a particular client’s life may be changed by therapy and what interventions may invoke this change. But for the plan to succeed, the client must also see the potential for change and must believe that occupational therapy can bring about the desired change. In this way, conditional reasoning is an integration of procedural and interactive reasoning (Fleming, 1991); the therapist sees what strategies might bring about change (procedural reasoning) and helps the client to believe in the potential of the plan to create the desired outcome (interactive reasoning). Conditional reasoning is a high-level skill because it synthesizes what the therapist knows about the person, the disease, and the various therapeutic activities that could be employed.

Amy would ask clients to describe their homes and their lifestyles and would incorporate that information into the occupational therapy program:

My favorite thing to do is to find out what their favorite thing is to do and do it. I always will say, “At home. Tell me what you will do at home. What do you do after you wash up?” That’s always the question. “Do you have a robe you put on to go back to your bedroom? Do you go in the bath? Do you take your clothes in the bathroom?” To me, that’s intriguing! Nobody knows what they do—they have to think about it so hard.

Amy tries to imagine clients in their homes and figure out what will and will not be safe, effective, and enjoyable. When contemplating a discharge plan for a client with dementia, Amy stated:

She’d be a perfect person to live with a family member. She doesn’t have
wandering behavior; she doesn't have any dangerousness other than she's just confused. She has a hard time figuring out the safest way to do things or even to sequence to complete a task. She'd be someone I'd worry about the stove with, leaving the stove on. But if she was living with someone, she'd probably be very easy to take care of.

**Narrative Reasoning**

Mattingly (1994b) noted that occupational therapists frequently talk about their clients as if they were telling a story. She also asserted that thinking of the client's life as a narrative could help therapists understand a client better (Mattingly, 1991). The occupational therapy experience becomes a subplot in a larger storyline of the client's life; the optimal outcome of this particular chapter is the reconstruction of a life altered by disease. Mattingly (1994a) labeled this reconstruction narrative reasoning and referred to the development of the story as therapeutic emplotment.

During observations, Amy often shared with me details about her clients' lives. She would tell me what profession they had been in, whether they had children, and details of their lifestyles. Amy recognized that her encounters with clients were only one chapter in a larger life story. She told me that she used to work hard to teach the textbook strategies associated with therapeutic media, such as adaptive equipment. Now she spends more time watching what clients instinctively do and finding ways to make that safe and effective. She wants to capitalize on what comes naturally to them so that the rehabilitation experience is woven more seamlessly into their lives outside of the rehabilitation facility.

**Summary**

Data from this case study suggest that the occupational therapy assistant in this study used the same modes of reasoning seen in studies of the clinical reasoning of occupational therapists. It is important to recognize, however, that there is some debate about the existence and validity of these forms of reasoning (Roberts, 1996) and that there is no standard method for classifying experiences and observations into one or more of the forms. In addition, a drawback of using a priori categories for qualitative data analysis is that it minimizes the ability to see new, unique, or unanticipated phenomena in the data. It is important to study whether forms of clinical reasoning other than those identified in previous research are present in the reasoning of occupational therapy assistants. Therefore, these issues demand consideration when reflecting on the findings of this study.

In this project, I studied the practice and clinical reasoning of one highly experienced occupational therapy assistant. The findings of this preliminary study encourage further research. Studies of a larger number of assistants would further enrich our understanding of the forms of clinical reasoning that occupational therapy assistants use. Future research could also examine the unique clinical reasoning challenges that therapists and assistants face while working together to deliver services, their communication process, and how their collaborative clinical reasoning can be facilitated. The unique challenges to clinical reasoning that assistants face need to be identified. Although this case study supports the observation that an occupational therapy assistant may use clinical reasoning in his or her practice, this observation needs to be confirmed by future research. ▲

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**References**


