
With and Without Words: Exploring Occupation in Relation to Young Children with Autism

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Abstract

In studying young children with autism and other developmental disabilities as occupational beings, determining what constitutes occupations is challenging, in part because existing definitions of occupation do not seem to fit the children. This paper explores what is an occupation for children with autism. By integrating literature and original research, this paper provides a working definition of occupation to fit the observed lives of five young children with autism. Occupation is defined as “a set of directed actions connected by physical movements, materials, space, or purpose within a time period, in a way that is meaningful to the individual executing them”. Words are not the only mode of defining occupation. Participants also were engaged in the process of defining, or framing those occupations in the moment that they were occurring. Framing is the process of identifying what is and is not the activity and what is relevant and irrelevant. An occupational frame has two components: the observable content (i.e., behaviors, materials used, etc.) and the subjective meaning or valuing of the occupation. Joint framing is an intersubjective process in which the occupation is defined between two people, such as an adult and child, in which one person can come to understand another’s occupation. It is the in-the-moment defining, or framing of occupations that gives conceptual definitions of occupations their pragmatic relevance to daily life and clinical practice.

Keywords

Daily activities
Occupational therapy
Theory formation
Qualitative methods
Frame analysis
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Occupational science is challenged to develop a formal knowledge base and conceptual foundation that includes the occupations of all people in order to understand them as occupational beings. The task of defining occupation is fundamental to the science because researchers must determine what constitutes an occupation in order to identify and study it as a phenomenon. Specifically, one must determine which of the observed or reported actions or behaviors count as being occupied. The challenge of defining and understanding occupation is magnified when studying certain populations. If an individual does not use language consistently to communicate, such as a young child or individual with a developmental disability such as autism, a researcher or clinician cannot ask the person what they like to do and why they enjoy doing it. For children and individuals with autism and other developmental disabilities, often most of what they do is defined from a deficit perspective in comparison to adult normative standards, obscuring the personal subjective experience. For people who do not engage in culturally typical occupations or occupations with which the researcher is familiar, the researcher may not recognize what is an occupation for that person and may have difficulty understanding the occupations. Identifying and understanding occupations in their diverse form may be crucial to acknowledging the diversity of human beings (Yerxa, 1993; Yerxa et al., 1990).

This paper addresses the problem of defining occupation for a group of individuals who seldom use language to communicate, young children with autism. Two sources inform this discussion. One, I critically reviewed relevant literature. I analyzed the key features of occupation as identified in the occupational science and therapy literature in relation to the sociological, anthropological, psychiatric, psychological, and autobiographical literature on autism. Two, I compared this with selected findings from my qualitative research study on the occupations of 5 three- and four-year-old children with autism who seldom used spontaneous language (Spitzer, 2001). The study relied heavily on participant observations so that the children were the primary informants on their own occupations. Over the course of several months, the children were observed in the range of their daily settings such as home, school, fast-food restaurants, parks, and therapy sessions. As the children and setting allowed, I participated in their occupations with them. Detailed field notes about the children’s occupations were created, coded, and analyzed using an interpretive approach (Spitzer, 2001, 2003). I

observed what each child did, paying close attention to how the actions were done, and attempted to identify how the child's actions clustered together to form occupations. Interviews with parents and other adults provided another data source and were used to triangulate methods and findings. My analysis started with a general notion of occupation as a grouping of action, that is, a way of occupying time, similar to Wood, Towers, and Malchow (2000), but had to reconcile how to group the children's actions into an occupation in a way that was consistent with existing literature both on occupation and autism.

Based on this analysis, I make two propositions about defining occupation. First, the existing conceptual definitions of occupation require modification to account for the occupations of individuals with developmental disabilities, such as young children with autism. I offer a definition of occupation tailored to fit these children's lives as I observed them. This is a working definition of occupation for future refinement by occupational scientists. Second, I advocate that defining occupation also be acknowledged as a dynamic, intersubjective process of the people who are engaged in occupation, not just a conceptual practice of theorists or researchers in occupational science. I present a preliminary model for how occupations are framed by participants in the moment of doing the occupation.

Defining Occupation with Words: Literature and the Conceptual Mode

In attempting to apply the literature on occupation to my research with young children with autism, I found areas of agreement and divergence and points needing clarification. My data was consistent with the literature on the features of occupation as "more than" an isolated behavior or movement, as intentional, and as meaning making (e.g., Clark & Carlson, 2000; Clark et al., 1991; Wood et al., 2000; Yerxa et al., 1990). I found a need to clarify the relationship of self-initiation and repetitiveness; meaning and purpose; self-awareness and conscious reasoning, complexity and skill; temporal structure, and the socio-cultural role.

More than an isolated act: A set of actions

The literature is in strong agreement that an occupation is a set, grouping, or cluster of actions. Occupations are defined in the literature as "chunks" (Clark et al., 1991; Yerxa et al., 1990) "units" (Clark & Carlson, 2000; Coster, Tickle-Degnen, & Armenta, 1995), "constellations" (Wood et al., 2000), and patterns (Humphry, 2002) of action. Occupations are more complex than just simple reflexive behaviors or bodily movements (Gray, 1997). "Occupation cannot be reduced to 'nothing but' a lower level and still be occupation" (Yerxa, 1998, p. 368). Thus, the single action of tapping one's fingers or touching fabric are not occupations in themselves but may occur in the course of occupations such as doing schoolwork or getting dressed. In some way, the pieces are linked together in an occupation (Clark, 1997), and the actions are connected together in some unifying

way, referred to as "coherence" by Wood et al. (2000). They are framed as an occupation.

Intentionality: Directed action

Directed refers to an active, deliberate, intentional action. A salient feature of occupations is action (Crabtree, 1998; Engelhardt, 1977), which is the active aspect of people engaged in their world (Polkinghorne, 1996). Through occupations, individuals constitute a sense of self as an occupational being, as a doer, as a maker of a meaningful life (Clark & Larson, 1993), develop and express their individual identities (Christiansen, 1999; Clark & Carlson, 2000), and "make their place in the physical, temporal, and social world" (Kielhofner, 1992, p. 50). It may even be the desire to have an effect on the world that drives further engagement in occupations (Burke, 1977; Kielhofner, 1992). Occupations are intentional acts (Clark & Carlson, 2000; Humphry, 2002; Wood et al., 2000) as opposed to automatically repeated, accidental, or random action.

Self-initiation and repetitiveness

For directed action to be considered a defining feature of occupation for young children with autism, three points must be clarified. First, directed action is not the same as self-initiation. Children often have adults directing, suggesting, or requesting them to do something (Coster, 1998; Graue & Walsh, 1995). The children I observed were mostly in the company of adults trying to get them to do things. Sometimes the children clearly were enjoying the activities and sometimes they repeatedly refused. However, often the children simply complied with the adult. Regardless of who initiates an activity, signs of the child's directed action are evident in the amount of focused effort or attention that is required by the activity.

Secondly, the clinical definition of autism seems incompatible with the notion of directed action in occupation. One diagnostic feature of autism is the manifestation of restricted and repetitive behaviors, interests, and activities (American Psychiatric Association, 1994; Charlop, Schreibman, & Kurtz, 1991; Rapin, 1991; Ritvo & Freeman, 1978). This repetitiveness suggests more automatic, than directed action. However, repetition can be a feature of occupations (Carlson, 1996; Clark & Carlson, 2000; Gray, 1997) especially in occupations of young children (Field, 1979; Fraits-Hunt & Zemke, 1996; Pierce, 1997; Trevarthen, 1980). Thus, in my attempts to reconcile my field notes with the literature, I determined that repetition (a) may be part of an occupation and (b) could be distinguished from repetitive behaviors that were not directed and therefore not occupational.

I assert that the distinction between repetitive occupations and repetitive behaviors is active, directed, intentional action in the former and automatic behavior in the latter. So-called "self-stimulatory" behaviors and other single, automatically repeated behaviors or movements did not meet the criteria to be considered directed action or an occupation. Thus behaviors such as flapping one's hands or swinging a toy around repeatedly would not be

Table 1. Examples of Occupations of a Sample of Young Children with Autism

Occupation	Brief Behavioral/Material Description	Interpreted Subjective Meaning
Dropping Dirt	Mike would drop one handful of dirt at a time in partial shade, where the dust would glisten in the sunlight. With his mother, would hold the handful in front of her; look at her; and, once she was looking at him, drop the dirt. She would blow the dirt as it fell, creating a bigger and longer-lasting cloud of dust. They would both laugh.	Visual aesthetics
Pouring	Alex would pour different substances (i.e. water, gravel, and sand) into different containers or targets (i.e. a cup, a dog's dish, potted plants, etc.) and in different ways. He controlled the flow of water or other substance to minimize spillage when pouring from large containers into small containers, from wide brimmed containers into narrow containers, or from different heights/distances.	Interest in experimenting with physical properties of the world
Drumming with Dolls	Britany would sit in the kitchen doorway, which was the center of all the household activities. She banged her dolls on the floor one at a time with a flick of the wrist. The dolls clicked softly on the linoleum floor as they hit it lightly in a steady, rhythmical pattern. With her mother, Britany would alter the speed/tempo of banging her dolls and look to her mother, who make "ow" sounds with each bang, speeding up or slowing down her ow's to correspond with Britany's banging.	Rhythm; Restoration (comfort); Interpersonal interaction
Gotcha Game	Justin would move away from an adult slightly, just out of arm's reach. As the adult reached, he would continue to move just slightly out of reach, smiling.	Social interaction; "Playing with" experiences of security and safety
Designing with Toys and Materials	Emma would carefully place toys and materials together to make unique creations such as complex "scenes" or layering of scarves, neck ties, and other materials. She would accept items offered to her to use and would accept placement of items by someone else when it was consistent with the way she was placing items. Otherwise, she resisted other people's changes to her creations and attempts to stop her. Although she spent time studying her projects as she was creating, she did not spend much time looking at them after she had stopped or protest when they were cleaned up later.	Visual aesthetics; Creative process

Note. This table provides a brief summary of five occupations. The meaning of these occupations is based on a detailed analysis of these occupations, how the occupations occurred, and how they compared with the children's other occupations which cannot be detailed fully in this paper (see Spitzer, 2001).

considered occupations if the child did not demonstrate any signs of directed attention to these behaviors. On the other hand, repetitive sequences of actions that require a level of skilled, directed action, such as repeatedly banging dolls with a certain motion of the wrist and dropping dirt so that the sun hits it at a particular angle, could be occupations (see Table 1). They are directed action, as they could not happen without focused attention to the way one is doing the action. In this way, occupation is defined as a separate construct rather than a reinforcement of society's disability labeling practices.

Thirdly, with individuals with limited language use, one often must rely on observable signs of directed action (e.g. Wood et al., 2000). Not all directed actions can be observed. An individual's mental actions (thought process) cannot be observed. Seemingly unintentional behaviors may be intentional occupations, but this cannot always be determined conclusively when one cannot access the invisible workings of the mind. For example, one child in my study, Emma, would cover her parents' bed with a mountain of extra pillows, various stuffed animals and extra blankets. She would hunt around the house for suitable materials and her favorite stuffed bears. She buried herself underneath some of the blankets and usually cuddled up with one or two of the bears. She did this several times a day usually when she first got home from school, after therapy sessions, and sometimes after dinner or her bath. She seemed rejuvenated after these rests, as she would follow them with very physical activities. Although Emma's daily creation of this special, sensory-comforting rest place was an important occupation for her and served the purpose of restoring her for other occupations, it was difficult to determine if the rest time itself was an occupation. Although she was awake, there were no observable signs of directed engagement during this "rest time." However, some adults with autism have described similar trance-like states as a form of meditation (Craig, 1999; Grandin, 1995) and Emma's resting certainly was similarly restorative for her. The extent to which Emma was actively and skillfully enjoying her rest time as an internal form of occupation is unknown. Observational evidence alone was not enough to determine if this activity was occupational. However, the possibility of it being an occupation could not be overlooked.

Meaning making: The drive to act

People are motivated to do some occupations and not others because of the occupation's meaning and/or purpose. The reason someone does an occupation, toward what intended end, is the purpose (Humphry, 2002; Wood et al., 2000; Yerxa, 1993; Yerxa et al., 1990). Examples of a purpose include: fun or pleasure, a biological need such as hunger, social interaction, learning, exploration, mastering new skills, creating, and curiosity. Why this purpose is significant for the individual is the meaning of the occupation. Meaning is central to an understanding of people as occupational beings (Clark & Carlson, 2000; Clark et al., 1991; Johnson, 1996; Peloquin, 1997; Yerxa et al., 1990). People make and express meaning through occupations (Crabtree, 1998; Mattingly & Fleming, 1994), which have subjective value

for the individual beyond the observed movement patterns (Fidler & Velde, 1999; Gray, 1997; Pierce, 2001b). Occupations do not just fulfill a general or specific purpose but are meaningful because they meet an individual's particular interests (Geist & Kielhofner, 1998; Matsutsuyu, 1969; Yerxa, 1998). Because of an individual's interests, the activity is in some way appealing, desirable, or attractive (Pierce, 1998, 2001a). The child may be intrinsically motivated to engage in the occupation for its own sake and experience pleasure in or value the actual doing of the occupation (Florey, 1969). An activity motivated primarily by extrinsic factors can also be an occupation as long as some extrinsic feature is important for that individual (Wilcock, 1998), such as social acknowledgement (Geist & Kielhofner, 1998), productivity or restoration (Pierce, 2001a). An occupation may simultaneously have unappealing features due to its challenge or timing, or the individual's fatigue, lack of skills, fear of embarrassment or failure, lack of resources, and so forth. Occupations may be valued, preferred, or have varying levels of importance to the individual.

Meaning and purpose

Applying the notions of meaning and purpose to the activities of children, especially children with developmental disabilities such as autism, is problematic in three respects. First, it is difficult to understand fully the significance of an activity for any other individual. Adults often have trouble interpreting children's actions from the child's perspective rather than their own adult standards, needs, and wants (Corsaro & Eder, 1990; Fine & Sandstrom, 1988; Glassner, 1976; Goode, 1994). Second, individuals who rely on language to communicate struggle to understand meaning in a child who uses language infrequently or inconsistently, who engages in a variety of behaviors that are identified as different from those of other children and who may perceive and experience the world in a different way (Durig, 1996; Goode, 1994).

Third, the purpose or meaning of an occupation may be difficult to determine based on observed behaviors. A particular identified purpose or function of an observed occupation may not be the individually experienced purpose or meaning of the occupation. Individual meaning and purpose are subjectively experienced and thus only signs of subjective meaning can be observed. The subjectively experienced meaning and purpose of children's occupations has had limited study (Humphry, 2002) because subjectivity has largely been studied through language-based communication. Based on research of the occupational behavior of prosimians, Wood et al. (2000) asserted "whenever access to persons' subjective experiences is denied.... objectively observable operational definitions of occupational behavior are necessary" (p. 7). They suggest that subjective experience is inaccessible for those who cannot express their subjective experience through language. However, there are other ways of accessing subjective experience especially among humans.

For example, all the children in my study enjoyed listening

to children's songs and sometimes imitating motions that corresponded with the songs. Professionals and the children's parents would often emphasize how the songs allowed the children to experiment and practice vocalizing and speaking. In my research, although the songs may have served a developmental purpose, this purpose did not appear to be consistently the individual purpose, intended purpose, or meaning of the action for the child. Most of the children seemed more interested in music because of its predictable rhythmic qualities and sometimes for its opportunities for social interaction (Spitzer, 2001). Consequently, I elected to focus on individual meaning, which subsumes the individual's purpose, as defining occupation. A purpose might be one of the ways of connecting a set of directed actions, while its meaning referred to why the occupation was important for the child.

I propose that individual occupational meaning can be understood, or at least approached, through a two-part process. One part is to analyze the *entirety* of another's engagement in daily occupations from self-initiated, to compliance in, to refusal of, to not engaging in available activities over time, to the way in which occupations are engaged. This allows more points to compare and contrast. It enables a basic understanding of the relative value or importance of various occupations and of potential future occupations. It also provides the prerequisite-shared knowledge and experience of occupations to build *intersubjectivity*, the second aspect of this process of understanding. Intersubjectivity is "a deliberately sought sharing of experiences about events and things" (Stern, 1985, p. 128). According to Goode (1994), intersubjectivity is possible between adults and children with developmental disabilities because there are nonlinguistic, felt understandings and experiences of the human world that we share. A description of the intersubjective process follows, under the discussion of occupational framing.

Occupational Meaning Making Without Self-Awareness and Conscious Reasoning

Although meaning making may seem to suggest conscious reasoning and self-awareness (Collins, 2001), I propose they are not central features of occupation. Some scholars have suggested that self-awareness is a distinguishing feature of human occupations (Clark et al., 1991; Gray, 1997). Yet, there is no evidence to support that young children with autism and other developmental disabilities, such as those in my study, have the cognitive ability for self-awareness, as it is generally understood. The self-reports of some adults with autism suggest that it is unlikely that children with autism think of themselves as a "self" that stands in some relation to others. In fact, Donna Williams (1998), an adult with autism, repeatedly described how difficult it was for her to conceptualize her own "self" and that thinking of her "self" has continued to be a source of challenge and fear. The extent to which anyone, regardless of age, cognitive ability, or disability, is self-aware is questionable. However, Humphry (2002) has asserted that children's actions in

relationship to themselves as opposed to simple copying of another's behaviors suggest a sort of "consciousness of what they *intend* to do" (p. 173). Consistent with Holland and Skinner (1997) and Stern (1985), I have elected to think of self, meaning, and other subjective experiences of young children, such as the children in my study, to be *felt* senses rather than cognitive processes or conscious experiences. It is an experience of actively doing rather than a conscious, articulated thought of "I am ____" or "I think ____". It may be a sense of being able to do something (Geist & Kielhofner, 1998). Whether these experiences also exist as cognitive concepts in the child's conscious thought processes is an issue far beyond the scope of this paper.

Complexity and skill

The features of occupational complexity and skill can be somewhat challenging to apply to children with autism. Occupations are described as complex, involving many subsystems of the human, and very individualized (Clark et al., 1991). Complexity requires the use of skills (Yerxa, 1993, 1998). Yet children with autism and other developmental disabilities are described almost exclusively in terms of their skill deficits and immature development. A definition of occupation that does not acknowledge the occupations of children with developmental disabilities because of the requirements of skill and complexity essentially dehumanizes those who engage in "less skilled" or "simple" activities (Wood et al., 2000). Additionally, Humphry (2002) has noted that young children in general often integrate immature skills to engage in occupations, where skills may be an outcome instead of a prerequisite for occupation. Consistent with Wood et al. (2000), I elected not to include a particular level or degree of complexity in my definition of occupation.

I propose that relative complexity and skill are implicit features of "a set of directed action". A set of actions is more complex than single acts. Directed action requires relative skill in comparison with an accidental, random, reflexive, or repetitive movement. Skills and complexity are relative rather than absolute in defining occupation. They must be looked at in relation to the individual child, not in comparison with normative standards.

Temporal structure

Repeatedly, occupation has been understood to be structured by a duration of time and to be a means of organizing time (Clark & Carlson, 2000; Engelhardt, 1977; Gray, 1997; Meyer, 1922/1977; Yerxa, 1993). According to Clark et al. (1991), occupations require "the ability to recall and project events" (p. 302). A "chunk" of activity suggests a sequence and boundedness. Occupations are described as having a beginning, middle, and end (Gray, 1997; Pierce, 2001b). The time period may be a brief moment or span one's entire life (Nelson, 1988). Its tempo, pace or rhythm may vary, but its meaning may be lost if too rushed (Clark, 1997).

Applying temporal structure as a defining feature of occupation is problematic with young children with autism.

These children are described alternately as (a) being disorganized by starting activities without finishing and running from toy to toy without playing with them (Ayres, 1979; Losche, 1990; Rapin, 1991), and (b) being rigid and ritualistic in their activities (American Psychiatric Association, 1994; Charlop et al., 1991; Rapin, 1991; Ritvo & Freeman, 1978). Yet having an awareness of time and experiencing temporal patterns are developmental processes (Humphry, 2002; Pierce, 1997). Knox (1997) found that some typically developing young children have a less structured, more "improvisational" style of play that is "unplanned and spontaneous and shifted direction according to the whims of the children" (p. 115). Structural components might be more correctly attributed to adult narrative thinking about occupations (Mattingly, 1998) than the actual doings in life. Because the clinical descriptions of autism stand in contrast to the descriptions of temporal organization and structure of occupations, I was concerned that adopting these characteristics of structure and organization as defining features of occupation might unnecessarily exclude the activities of children with autism. Therefore, I opted to entertain these issues as questions rather than consider structure and organization to be a defining component of occupation. I acknowledge that an occupation occurs within a time period but do not specify a temporal structure. My findings on this topic are extensive and go beyond the scope of this paper, and thus warrant a separate discussion in future work. I also urge occupational scientists to do further research on temporal structure prior to considering it an integral feature of occupation.

The Socio-Cultural Role of Occupation in Acknowledgement and Acceptability

Although the socio-cultural context is an important factor in an individual's occupations (Clark et al., 1991; Dunn, Brown, & McGuigan, 1994; Pierce, 2001a; Wilcock, 1998), to what extent cultural acknowledgement or acceptability is a defining feature of occupation is less clear. Many of the currently accepted definitions of occupation suggest that some form of social-cultural acceptability or acknowledgement is an essential characteristic of occupation. Occupations have been described as contributing to society (Fidler & Fidler, 1978), being "socially sanctioned" (Yerxa et al., 1990, p. 5), being "socially valued and recognized" (Yerxa 1993, p. 5), and fitting in a culture (Yerxa, 1998). Furthermore, a common definitional requirement of occupation is having been named or labeled in the culture (Clark & Carlson, 2000; Clark, et al., 1991; Fidler & Fidler, 1978; Yerxa et al., 1990), another form of social acknowledgement.

The problem with applying this notion to children is that because the dominant Western society is adult-centered and "normative" focused, the occupations of children, especially those with developmental disabilities, tend to be under-recognized, under-acknowledged, and undervalued. The self-selected occupations of children in general have been labeled and dismissed broadly as play (Pellegrini, 1995;

Sutton-Smith, 1997), a generic category of activity (Pierce, 2001b). Most of the research on the play and daily activities of children with developmental disabilities such as autism continues to describe deficient normative activities - immature activities or failure to engage in expected activities (Hellendoorn, van der Kooij, & Sutton-Smith, 1994; Rubin, Fein, & Vandenberg, 1983). Individuals with autism may engage in occupations that are personally important but meaningless in the non-autistic culture (Bagatell, 1998). A number of adults with autism have asserted that there is an autism culture in which their activities fit and are meaningful (Brewer, Lissauer, Seiss, & Weeks, 1999; Williams, 1998). Unconventional occupations question the emphasis on social conformity and normative behavioral expectations (Clark, 1997; Jackson, 1998a, 1998b).

In my study of children with autism as occupational beings, I wanted a definition of occupation that would include all the children's occupations, no matter how unconventional for a particular cultural environment. Therefore, I did not include in my definition any form of cultural acknowledgement or meaning such as naming. Such a definition was not intended to deny the importance of the socio-cultural context of personal occupations but to enable the study of the relationship between the two. By studying previously unrecognized occupations, identifying them, and giving them names (see Table 1), they can be discussed, socially recognized, and potentially valued.

A Working Definition

Based on these points of agreement with, modification of, and divergence from the literature and grounded in my research findings, I created a working definition of occupation to better fit the children's lives as I observed them. This is not a rejection of earlier works on occupation, but an expansion and clarification of those works. My definition of occupation is consistent with the general literature on this topic but has been tailored to the phenomena I observed. Adjustments were needed because the generally accepted definitions and their accompanying assumptions were not easily applied to this population. This is probably due to the literature being developed in reference to individuals who use language to a greater extent than did the children in my study. While some might assert that this is an exercise in semantics, I disagree. Words have meaning in our society; they are a mode of empowering and subjugating people (Foucault as cited in Rabinow, 1984; Shohat & Stam, 1994; Smith 1987). Words order and give meaning to experience in a culturally relevant way (Culler, 1986; Heidegger as cited in Steiner, 1993). In order to recognize and appreciate fully the strengths and abilities of the children in my study, it was necessary to make some adjustments in wording and some clarifications in conceptualization in the definition of occupation. The essence of previous definitions remains the same. The changes I adopted were needed to assure that the definition would include the occupations of the children.

I conceptualized occupation as a set of directed actions

connected by physical movements, materials, space, or purpose within a time period, in a way that is meaningful to the individual executing them (Spitzer, 2001). Physical movements refer to any bodily motion such as running, jumping, banging, pulling, pushing, kicking, gesturing, eye gazing, and making sounds. Materials are physical objects that can be manipulated or used such as dirt, toys, string, food, furniture, other people, and one's own body. Space is the physical environment including location (e.g. rooms, inside/outside, etc.), fixed objects, and barriers. A change in movement patterns, materials or setting often, but not always, indicates a change in occupation. Purpose is a goal or objective of one or more participants that is not always "visible" to or appreciated by another. The time period may be as brief as a moment or last across days. Meaning is created out of the connections among movements, materials, space, purpose, and time. Meaning is the subjective significance of an activity that may be sensory/felt, emotional, personally symbolic, or socially symbolic. The meaning may be experienced as positive, negative, or mixed.

Beyond Words: The Process of Defining Occupation in the Moment

Defining occupation is both challenging and fundamentally pragmatic to a science and practice about occupation for children with developmental disabilities such as autism. When I began my research on the occupations of young children with autism, I had accepted a certain amount of theoretical ambiguity about defining occupation and was comfortable with my intuitive sense of what is and is not occupation. Obviously, it would be difficult, if not impossible, to do research on occupation without addressing what "occupation" is. Soon after I began my field research, I realized that I would have to deal with this definitional issue. I first tried to identify specific occupations. I became frustrated with trying to fit the continuum of doings into boxes of individual occupations and frustrated with trying to identify where to "draw the line" as to what was and was not an occupation or part of an occupation. For example, it was even difficult to write field notes about my observations of activity over a stream of time because the field notes could not easily be broken into paragraphs, which is a literary mode of chunking behaviors.¹ I dropped this definitional area of analysis several times; but this study, what I observed and my analysis, repeatedly forced me to revisit this issue because it was critical in understanding these children's lives.

It was the children in my study who taught me that defining an occupation is not only a theoretical issue but also a pragmatic one. It is a process to be examined. What is the occupation, what is he or she doing, and what are we (as joint participants) doing are critical questions in being able to understand the occupation and participate in an occupation with the children. These questions implicitly frame an occupation through action without words.

From the research field: A lesson on framing an occupation

Defining where one activity ends and another one begins can be very difficult. My field notes list numerous actions that are difficult to link together. It may be that the actions are not connected together for the child or it may be that I was not able to identify the links as the following example illustrates:

Mike walked around the yard. Then he walked inside the house. He walked into the living room. Then he went back outside. He picked up a little toy shark, dropped it, and then picked up a bigger toy shark and carried it around.

Another example illustrates how what may initially seem to be separate actions were linked together in an occupation. By recounting the following set of directed actions, I have separated these actions from the behaviors that came before and after in the continuum of time. I have foreshadowed for the reader that this was an occupation. This bit of clarity in the retelling of events downplays the real confusion I experienced as I failed to recognize that all these behaviors were linked as this occupation was unfolding. I initially thought Mike wanted to get a snack. Then I thought he had changed his mind and wanted my toys. In the next instant, I thought he might be angry with me because he took my toys away. Then, as he took my hand, I thought he wanted to "do something" with me. He seemed to keep changing his mind about what he wanted to do. Trying as desperately as I was, I could not make the right connections:

Mike was walking through the kitchen. He grabbed a granola-bar wrapper from the kitchen counter and threw it on the ground. Then he glanced around as I wondered where the granola bars were kept. Mike moved a chair to the refrigerator, climbed up, stood on the chair, and opened the freezer door. He must want something to eat, I thought. He looked in, shut the door and got down, leaving the chair. "Didn't see anything in there, huh?" I asked. Mike made some sounds and grabbed one of the toys out of my hand. Apparently he has decided that he would rather have my toys than eat, I thought. "You want that one?" I asked. He threw it on the ground. "Hey!" I said. He made another sound and grabbed the other toy out of my other hand and threw it on the ground. "Nothing for me? I can't play with the toys?" I asked. I wondered why he did not want me to play with his toys. He grabbed my hand. "What? What? What?" I asked eagerly as he led me outside. He had never grabbed my hand before and I was excited to see what he wanted to share with me. "Show me, Mike!" I said. He made sounds as we walked across the patio. He stopped in front of the garage door, making one sharp sound like "aye!" and then banged on the garage handle.

Just defining this cluster of actions as an occupation is still not enough for the reader to understand what the occupation was. All of these actions were about "getting a snack." Mike had wanted an ice cream bar or Popsicle. He

looked in the freezer in the kitchen but none were there, or maybe opening the freezer is what reminded him of ice cream bars. While only a few ice cream bars were stored in the kitchen freezer at a time, more were always kept in the garage freezer. He had taken the toys out of my hands because I would, in fact, need two empty hands to lift the old, heavy, wooden garage door. This was unlike most other times when he wanted me to get something or he got something himself by putting both toys in one hand or holding them against his body with his arm, leaving his hands free but not having to put the toys down. He had thrown the toys rather than setting them down perhaps because they were not a part of the activity, or because he was in a hurry, or to provide emphasis. Finally, he had led me outside to show me what he wanted, emphasizing his intentions with a vocal intonation and banging on the door handle. Because I had not been able to figure out what the occupation was early enough, I could not actively participate in it despite my intense desire and repeated attempts to do so.

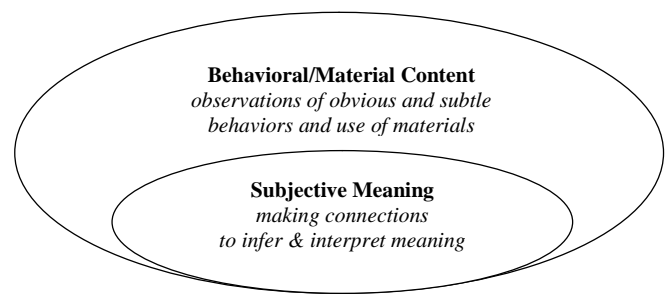
Mike taught me that what is and is not the activity is constantly being negotiated during occupations. The process of defining the occupation, not in words, but through actions and felt experience involves a selectivity, discriminating key features that delineate the activity and features connected to each other through the activity. In this case, the toys were irrelevant. Throwing the toys was not as relevant as emptying my hands. Other relevant features were seeing and feeling the granola bar wrapper in initiating getting a snack, getting a chair to reach the freezer door, looking inside the freezer door, walking to the garage, and pulling on the garage door handle. The process of defining the occupation from the child's perspective was a necessary prerequisite for understanding its meaning and potentially sharing in the occupation.

Framing

The ongoing processes of defining occupation are similar to the processes of defining activities in a given society. Societies establish rules for organizing social interaction (Goffman, 1963; Silverman, 1993). Goffman (1974) called these rules "frames" for defining the situation and determining relevance and irrelevance. Shared frames provide the basis for naming occupations in a society. They are general social cultural ideas or categories of activities (Pierce, 2001b).

Although occurring through a similar process, occupational frames are specifically tailored to individual occupations despite a co-existence with the more generic, social frames. The social activity frames are adult-centered and normatively oriented and thus can be barriers in understanding the child's framing of his or her personal occupation. To understand occupations from the child's perspective, based on the child's internal "definition", new occupation-specific frames must be developed. To share in occupations, joint occupational framing is necessary. Joint occupational frames are not pre-existing frames, rather they emerge through the intersubjective process of doing an occupation with the child.

Figure 1. Piecing it Together: A Model for Framing an Occupation



When an adult is framing an occupation with a child with limited language, the adult analyzes two inter-related aspects of the occupation (see Figure 1). The first is the immediately observable, what Clark, Wood, and Larson (1998) call its form. This is the etic perspective of occupational behavior (Wood et al., 2000). The researcher or other person observes the child's behaviors and the materials used. The behaviors are what the child does. The materials may include toys, objects, the environment, other people, and their own bodies. Some observations are obvious such as the frequent use of a particular toy like cars, dinosaurs, Barbies, stuffed bears, and so forth. Other observations are subtler and may go unnoticed except by keen observers. These may be a momentary glance, a touch, a body movement, a pause, or other nonverbal cues to negotiate the activity. From these observations, one can make inferences about volitional predispositions and preferred activities (see Geist & Kielhofner, 1998 and Goode & Gaddy, 1976, respectively, for structured guidelines on these processes).

The other layer of an occupational frame analysis is subjectivity. An occupation includes an individual's subjective perspective or experience of the occupation (Humphry, 2002; Pierce, 2000b). The meaning may be interpreted or inferred from the observed cues and from knowledge of the child's occupational history, or sensed from participation in the activity. At this level of analysis, both the child's subjectivity and the child's intersubjectivity with another are at issue. Here, one attempts to ascertain why the activity is meaningful by examining how it is done. Why does the child care about this activity? Why would they rather do this instead of something else? Why do they want to do this now but not before? What is the child's intended outcome (Humphry, 2002)? It is at this level that one determines what is and is not part of the activity. One connects present observations with past events, experiences, and relevant knowledge to infer and interpret meaning about the present occupation.

For example, a common occupation for Emma was designing with toys and materials. She would carefully place toys and materials together to make creations such as complex "scenes" or layering of scarves, neckties, and other materials. Each creation was unique. She would accept items

offered to her to use and would accept placement of items by someone else when it was consistent with the way she was placing items, suggesting a particular valuing of visual aesthetics. Otherwise, she resisted other people's changes to her creations and attempts to stop her. Although she spent time studying her projects as she was creating, she did not spend much time looking at them after she had stopped, nor did she protest when they were cleaned up later. Her focusing on the doing as opposed to the end product she created indicates that the creative process was a meaningful aspect of this occupation for Emma.

It is at the subjective level that actions are linked together, "shaped by motive and intention" and connected to time and experience beyond the present (Mattingly, 1998, p. 91). Polkinghorne (1988) succinctly describes how felt experiences gain meaning through connections to other experiences:

Our sensory apparatus and brain structures present a rudimentary experience of objects and activities. The actions of the realm of meaning add to this awareness an additional presence of relationships and connections among these rudimentary perceptions, including: (a) one perception is the same as or not the same as another, (b) one is similar or dissimilar to another, (c) one is an instance of another, (d) one stands for the other, (e) one is a part of the other, and (f) one is the cause of the other. In the ongoing production of meaning, these various kinds of relationships are combined to construct connections among things. (Polkinghorne, 1988, p. 4)

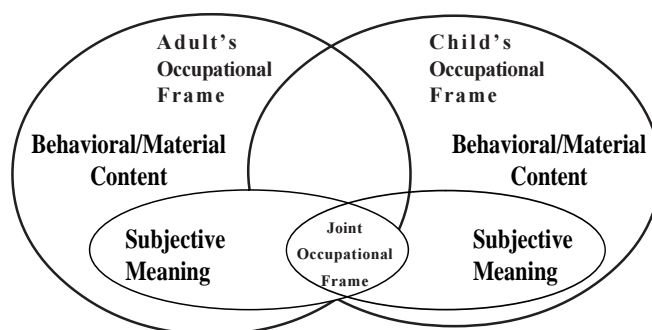
Likewise, occupations transform a chronology of actions into a meaningful whole by connecting actions together. The child experiences the meaning in the doing in that his or her actions are connected to interests and past experiences. The occupation is embodied in a particular context (Pierce, 2000b). It is the connections that define the occupation, make it into a "whole," and create its meaning.

Framing the occupation may not necessarily be fixed before it occurs, but may emerge in the course of its occurrence. Or one may be able to see it afterwards, but only if one attended to the often-subtle cues along the way. For example, I did not understand how Mike's actions recounted above were connected until he tried to get into the garage, where I could connect my knowledge that ice cream bars are highly preferred and that they often are kept in the garage refrigerator to keep Mike from eating them all at one time. The framing process engages participants, allowing them to express and share meaning with each other as they gain a sense of what the occupation is.

Although the importance of subjectivity in occupations has been acknowledged previously in the literature (e.g., Pierce, 2001b), the role of intersubjectivity has been less recognized. I propose that intersubjectivity, a shared understanding of the occupation, is critical to the study and sharing of the occupation. Defining the occupation

may actually be key to successful social interaction. One may not be able to share an activity with another if the two have different frames about what the occupation is. Recall, for example, the case of Mike getting a snack. I was attempting to link materials and behaviors together to identify which were parts of the content of the occupation and which were irrelevant. But I failed to understand the occupational frame Mike was using to connect his actions until the end when it was too late for me to share in the occupation. I was engaged in trying to understand him but could not be an active participant in "getting a snack" because we lacked a joint framing of the activity—an intersubjective or shared sense of what two or more people are doing together. This is not to suggest that a joint frame means that the two individuals have the same frame of the occupation or experience the same meaning. Rather, a joint framing suggests a point of similarity, an overlapping of individual occupational frames (see Figure 2). In this way, the subjective occupational experience of an individual is approached and, to some degree, shared by another. Others, by understanding a child's succession of actions as being an occupation, recognize the child's humanity and individuality.

Figure 2. The Intersubjective Process of Joint Occupational Framing



For example, Britany would bang her dolls on the floor, sitting in the kitchen doorway. Given that the frequency of this occupation increased with the increased occurrence of school and therapies, it seems that this was a restorative occupation for Britany. By banging her dolls in the kitchen doorway, people were stepping over and through her play constantly as this was the most central location in the house—most all the family's occupations occurred in the kitchen and adjoining family room. She could have sat in a corner of the kitchen but did not, suggesting that she did not mind being in the middle of everything and perhaps even enjoyed her social proximity to the family's occupations. Over the course of several months, she even began to pull people over to sit next to her as she banged her dolls on the floor, further suggesting the importance of a social quality to this otherwise solitary occupation. Britany banged her dolls on the floor one at a time with a flick of the wrist, which took me months to be able to emulate. Whenever I tried to bang the dolls on the floor, she took them from me until I was able to bang them with the same motion and then she handed dolls to me and I

banged them alongside her. With this particular flick of the wrist, the dolls clicked softly on the linoleum floor as they hit it lightly in a steady, rhythmical drumming pattern. The importance of the way the dolls were drummed on the floor suggested that the particular rhythmical sound they made was an aspect of its occupational meaningful for Britany. She usually resisted people's attempts to use her dolls in other ways and to interact with her dolls; however, there was one notable exception. Sometimes her mother would sit down in front of Britany and make "ow" sounds with each time Britany drummed a doll on the floor. Britany would smile and alter the speed/tempo of her movements and look to her mother, who would speed up or slow down her ow's to correspond with Britany's drumming. Britany would switch dolls and look at her mother who would switch tone/pitch of her ow's to correspond with changes in dolls. Britany would sometimes look at me and then I would make the sounds, switching her gaze between her mother and I who made the accompanying sounds to her drumming respective to her gaze at each of us. Britany's interest in this modification of her drumming dolls on the floor seemed to confirm that it was the sounds and potential interpersonal interaction that was meaningful to Britany. Through sharing this occupation with Britany, her mother and I were able to establish a shared frame of what we were doing—making music together.

Consistent with the occupational science literature, Donna Williams (1998), an adult with autism, contends that many individuals may participate in the same activities but in very different ways and for very different reasons. She contends, and I concur, that it is not enough to know "what" people do. We must also look at the "how" and the meaning, as these provide us with more information about "who" is the child is, their occupational being. The "what" is the most easily observable. The "how" requires more careful observation, analysis, and interpretation. The meaning must be inferred from the "what" and the "how" (the occupational form) in consideration of the scope of a child's other occupations and occupational history.

For example, both Mike and Alex liked to use dirt, but they did so in different ways that suggested different individual occupational meaning. Mike would drop one handful of dirt at a time in partial shade, where the dust would glisten in the sunlight. Sometimes, Mike dropped dirt with his mother by holding a handful in front of her face, looking at her, and once she looked at him, dropping the dirt in front of her. She would blow the dirt as it fell, creating a bigger and longer-lasting cloud of dust. They would both laugh. For Mike, the meaning of dropping dirt seemed to be enjoying the visual aesthetics of the falling dirt. On the other hand, Alex would pour dirt and other substances such as water, gravel, sand into different containers or targets (i.e. a cup, a dog's dish, potted plants, etc.) and in different ways (i.e. bending down and standing up to adjust the height between the containers). Often, Alex's pouring required great effort to control the water or other substance when pouring from large containers into small containers, from wide brimmed containers into narrow containers, or from different heights. For Alex, pouring seemed

meaningful because it was a way of experimenting with the physical properties of the world. The differences in how Alex and Mike used the same material (dirt) suggest differences in occupational meaning and who they are as occupational beings.

Occupational scientists' attempts to understand subjective meaning will always be limited, as we can never "know" the inner experience of another. We can only attempt to approach it. Further research is needed in this area (a) on the occupations of individuals with developmental disabilities such as autism and cognitive impairments who do not use language extensively to communicate meaning and (b) to determine to what extent the process of occupational framing may generalize to other individuals or be specific to particular populations.

Implications for Occupational Analysis

The process of occupational analysis may need to start with form before addressing meaning and purpose especially for young children; individuals with autism, other developmental disabilities, or cognitive impairments; or those who do not use language extensively to communicate meaning. Because it is observable, occupational form may be the most accessible aspect of the occupation. Subjective occupational meaning may not be immediately accessible. Only hints at occupational meaning may be identified initially. From a study of the form, an occupational scientist or therapist can soon begin to address meaning and purpose. Because the two are interconnected, this is a recursive rather than sequential process. Furthermore, given its subjective and intersubjective nature, a rich assessment of occupational meaning will unfold over time. This process of occupational analysis differs from a therapist's clinical reasoning process which organizes the results of an occupation-based assessment in reverse order for planning intervention—starting with meaning and progressing next to purpose, form, and then performance components (Hocking, 2001).

Conclusion

Defining an occupation is of pragmatic importance conceptually and as a process. In its conceptual form, definitions provide a language for research, knowledge building, and clinical practice. Our definitions must be continually revised to include the occupations of the diverse people in our world. I have suggested changes to improve applicability to the occupations of children with autism. I offer this revised definition in the ongoing dialogue about what is occupation.

Occupations are also defined without words, by the people involved in an occupation. A preliminary model of this process was offered to represent the in-the-moment defining or framing of occupations. Framing bridges the externally observed behaviors with the internal subjective experience through making connections and interpretations. Through

framing, people create and identify meaning in their occupations. The participants determine what the occupation is about and what it is not about, what is relevant and irrelevant, what is included and excluded. That is, they determine what set of action is the occupation. This provides the base for understanding individuals as occupational beings in the entirety of the occupations they value and do not value, from the range of occupations in which they elect to participate. Occupational framing may itself be a key feature of occupation. Perhaps it is this in-the-moment defining of occupations that motivates occupational scientists and occupational therapists to continually struggle with defining occupation as a concept. It is at the crux of understanding another's occupations whether in research, in daily life, or in the daily demands of clinical practice.

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Endnote

¹I chose to write my field notes alternately going on for pages at a time without breaks or making new paragraphs with each apparent change or where it seemed to fit at the time. In my subsequent analysis, I had to ignore these literary clusters or lack thereof because they seldom corresponded with occupations.

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