Do Nussbaum’s ten central human functional capabilities extend occupational therapy’s construct of occupation? A narrative review

Tahmineh Mousavi, Susan Forwell, Shafik Dharamsi, and Elizabeth Dean

Abstract

Background. Capability as a human rights construct has similarities to the occupational therapy construct of occupation that has been conceptualised within three primary frameworks: person-centred, context-centred, and person/context-centred.

Purpose. In this narrative review, we explore similarities and differences in the constructs of occupation and capability vis-à-vis the ten central human functional capabilities comprised within Nussbaum’s capabilities approach.

Findings and conclusion. The central capabilities of this approach are not only congruent with both person and context aspects of occupation, but also extend these conceptualisations. Exploration of occupational therapists’ views about these central capabilities would elucidate the practical implications of these findings.

Key words

Capabilities approach, constructs of occupation

Reference


The purpose of this review is to compare and contrast the constructs of occupation, as conceptualised within the profession of occupational therapy, and capability, as conceptualised within the capabilities approach based on a human rights foundation. The capabilities approach described by Nussbaum (2000) comprises ten central human functional capabilities. We synthesised literature from key sources in the occupational therapy and science literature regarding occupation-related frameworks, and from Nussbaum’s (2000) seminal work on the capabilities approach and its ten capabilities. We summarise our findings in a narrative review. We then reflect on the relationship of these constructs and the implications of the capabilities approach and its ten central human functional capabilities for occupational therapy practice. Finally, we discuss the need for research to establish the views of occupational therapists about the capabilities approach and its potential application.

The construct of occupation

The understanding of occupation within the occupational therapy professional context has been advanced based on contributions ranging from psychology, sociology, geography and economics, to leisure science, public health and occupational therapy (Yerxa et al., 1990). Occupation has become an inclusive term such that it has relevance to health and healthcare including but not limited to activities of daily living (Hinojosa & Kramer, 1997) goal-directed activities (Christiansen, Baum, & Bass-Haugen, 2005); and activities or situations in which “people engage to fulfill their time and give life meaning” such as avocations and vocations (Hinojosa & Kramer, 1997, p.865). Occupation can also be viewed in relation to other constructs. For example, social ecologist Brian Little (1983), developed the personal projects approach (Christiansen, Backman, Little, & Nguyen, 1999). Based on this
approach, activities are understood as a way to link “motives or needs to specific goal-directed behaviours” (Christiansen, Little, & Backman, 1998, p. 439). Occupation can also be viewed from the perspective of activity theory rooted in the work of Marx, Vygotsky, and Leont’ev (Shanahan, 2010). Based on this theory, activities are considered in relation to subject, object, actions, and operations (Shanahan, 2010). “In activity theory, the distinction between short-lived goal-directed action and durable, object-oriented activity is of central importance” (Engestrom, 2000, p. 960). These unique and overlapping perspectives are useful in our continued examination of the construct of occupation. For the purpose of this review, occupation is discussed in relation to three common frameworks used in occupational therapy, namely, person-centred, context-centred, and person/context-centred.

The person-centred framework of occupation
The person-centred framework of occupation comprises four components that include physical-biomedical (Stewart, 2003), emotional-psychological (Krupa, 2003), spiritual (Christianson, 1997; McColl, 2000), and cognitive-neurological (Doubt, 2003). Identifying and labelling these person-centred components of occupation facilitates a broader discussion and supports the need for contributions from many disciplines.

The physical-biomedical component of the person focuses on functional movement related to occupational engagement and applies mechanical principles to effect physical movement (Pedretti & Early, 2001). This dimension is best evaluated by the occupational therapist with measures of joint range of motion, capacity for motion, strength, stability, control, and endurance that are needed during meaningful tasks and activities (Kielhofner, 2004; Pedretti & Early, 2001; Stewart, 2003). With musculoskeletal, neurological, and autoimmune dysfunction, the physical-biomedical dimension of occupation is disrupted (Kielhofner, 2004). In occupational therapy, this is viewed as one dimension of care. Contemporary practice subsumes a holistic approach that considers both the individual and his or her context.

Theories, models, and approaches based on the emotional-psychological component of the person concentrate on meaningful engagement in occupation as “the key to creating a healthy body and mind” (Schwart, 2003, p.8). This dimension focuses on the therapeutic, valued and creative nature of a person’s occupations. Engaging in pleasurable, meaningful, employment-related or educational occupations is thought to support the physical body, nurture the mind, and influence “a new life upon recovery” (Batton, 1920, cited in Schwartz, 2003, p.307). Conversely, occupations that erode these occupational attributes can erode a person’s self-esteem and self-worth (Grandey, 2003).

Various approaches have been used to address the emotional-psychological dimension of the person. For example, behavioural therapy is used to improve self-awareness, self-expression, and self-esteem (Duncombe, 1988) learning theory and approaches may be implemented to improve functional skills (Giuffrida & Neistadt, 2003) a psycho-educational approach to build understanding and skills to facilitate self-management (Barlow, Turner, & Wright, 2000) and a motivational approach to mitigate deficits related to emotional health that affect behaviour and occupational engagement (Schwamme, 1996).

The cognitive-neurological component of the person has become better understood due to the growing body of knowledge in the neurosciences (Doubt, 2003). Approaches to address deficits of the cognitive-neurological component focus on perceptual, sensorimotor, executive function and neurodevelopmental skills that use purposeful activities to achieve functional outcomes (Doubt, 2003; Pedretti & Early, 2001). The most recognised approaches and theories include sensory integration approach, proprioceptive neuromuscular facilitation; and strategies that have emerge from research in motor control theory and motor learning theory (Doubt, 2003). These approaches focus on the person from the perspective of his or her cognitive, perceptual, and neurological abilities and integrated attention to occupation and tasks throughout the remediation process (Doubt, 2003).

Finally, another dimension of occupation is spirituality. The spiritual component of the person and its relationship to occupation has been recognised as an important dimension. Spirituality which is defined as the experience of meaning and purpose in daily activities and all aspects of life (McColl, 2000) is now a core construct within the Canadian Model of Occupational Performance and the Occupational Therapy Practice Framework (American Occupational Therapy Association, 2008; Canadian Association Occupational Therapists, 1997; Wilson, 2010). Approaches addressing the spiritual component focus on the individual’s religious and spiritual beliefs systems and ways of being (Howard & Howard, 1997; McColl, 2003).

Engaging in meaningful activities can serve as a vehicle for a person to express and nurture spiritual needs (Barry & Gibbens, 2011; Bassett et al., 2008). McColl (2000) proposed that spirituality provides meaning to activities, and meaningful activities can promote spirituality. In turn, religious and spiritual beliefs may influence occupational choices and level of engagement.

In summary, the person-centred framework of occupation that underpins person-centred practice, situates the issues, problems and successes within the individual. This approach attributes the extent of occupational engagement or challenges to it, to the person. There are advantages and disadvantages that underlie the person-centred framework of occupation. Advantages to the clinician include ease of problem identification related directly to the person, and treatment strategies and outcomes focus on individual issues. The disadvantages include its inherent narrow focus and lack of inclusion of a range of determinants of occupational engagement. In the person-centred approach, occupation
is viewed as an individual responsibility, thus relinquishing society's responsibility and the social, political and economic influences exerted through policy and enacted by law, social norms and social programs.

There are limitations to the person-centred framework of occupation. Barriers external to the individual are not well reflected. For example, potential social-environmental barriers to occupational engagement such as discrimination are not reflected.

**Context-centred framework of occupation**

The context-centred framework of occupation includes cultural and environmental influences. Given the breadth of these influences, this framework reflects perspectives from a rich diversity of disciplines (Bonder, Martin, & Miracle, 2004; McColl, 2003).

To embrace culturally diverse influences scholars have argued that the construct of occupation needs to be “culturally relative” (Darnell, 2002), as “a form of colonization” (McKinley, 2002) as “a communitarian necessity” (Townsend & Christiansen, 2004) as “the basis of civil society” (Thibeault, 2002) and “as an economic concern” (Wilcock, 2001, cited in Whiteford, 2005, p.79). Culture constitutes people's identity and influences occupation, health, and wellbeing (Bonder, Martin, & Miracle, 2004). Coupled with globalisation, there are increasing requirements to recognise and understand cultural variations (Dickie, 2004). Awareness of cultural influences with respect to the construct of occupation assists in achieving an appreciation and tolerance for occupational variations among people.

The environmental influences that affect occupation and its engagement include physical, social, economic and political (Law, 2003). The impact of the environment may constitute the most important determinant that fosters or limits occupational engagement of an individual or a group of individuals (Law et al., 1996). Knowledge of the environmental influences of occupation by healthcare workers can help them adapt an individual's environment to improve occupational performance. The environmental influences determining occupational engagement locate “the source of occupational performance problems entirely outside of the person” (Law, 2003, p. 177).

The person-centred and context-centred frameworks of occupation are limited in that they assume a dichotomy of influences that impact occupational engagement. More likely, occupational engagement reflects individual influences interacting with factors associated with his or her unique context. An approach that embraces each of these components and offers insights into the optimal interventions to foster engagement and limit deprivation is required.

**Person/context-centred framework of occupation**

A person/context-centred framework of occupation, i.e., a framework reflecting the interaction of the person and his or her context, is reflected in models in occupational science and occupational therapy including the Model of Human Occupation (Kielhofner, 1995), the Occupational Adaptation Model (Schkade & Schultz, 1998), and the Ecology of Human Performance (Dunn, McClain, Brown, & Youngstrom, 1998). Such a framework focuses on the interrelationship of person and context.

According to the Model of Human Occupation, occupational engagement is a complex interaction between multiple personal and environmental factors and describes occupational behaviour, motivation and patterns, occupational dysfunction, occupational engagement, and the effect of environment on occupation (Kielhofner, 2008). This model describes three subsystems, “the volition subsystem (personal causation, values, and interests), the habitation subsystem (habits and roles), and the performance subsystem (the skills of the mind, brain, and body working together)” and posits that engagement in occupation takes place in an environment that provides information and feedback on these subsystems in order to create an individual's capability and performance (Pedretti & Early, 2001, p. 9).

The Occupational Adaptation model defined adaptation as “an interaction between the person and occupational environments (consisting of work, play and leisure, and self-maintenance functions) in response to occupational challenges” (Schkade & Schultz, 1998, p. 530). The basis of the Ecology of Human Performance model rests on the “ecology, or the interaction between a person and the context, affects human behaviour and task performance” (Dunn, McClain, Brown, & Youngstrom, 1998, p. 531). Based on this model, changing the person, the context, the task, or the relationship between these influences will cause a change (improvement or deterioration) in performance.

**The capability and capabilities approaches**

The capabilities approach advocated by Nussbaum (2000) emerged from the capability approach described by Sen (1980). The capabilities approach reflects a human rights and social justice perspective. It has come to play a major role not only in social theory and economics, but in global domains of policy and development over the past 30 years. The United Nations Development Program (UNDP) has published the Human Development Report annually since 1990, which is partly based on the capability approach (Alkire, 2002; Robeyns, 2006; UNDP, 1990–2008). In the Human Development Reports, human development is defined as “a process of enlarging people’s choices” which is achieved “by expanding human capabilities and functionings” (UNDP, 2000, p. 17). This perspective has gained support among academics as well as international agencies and non-governmental organisations (Alkire, 2002; Pogge, 2002), and is viewed as being consistent with human rights and social justice.

**The capability approach**

In developing the capability approach, Sen (1980) focused on improving the conceptualisation of human development with special reference to world poverty. He suggested that typical
frameworks applied to welfare economics focused narrowly on income generation and distribution rather than on a broader perspective (Anand, Graham, & Ron, 2005; Clark, 2005; Pogge, 2002). Given its multidimensionality, the capability approach replaces the traditional singular view of poverty as low income or the inability to obtain goods and services (Alkire, 2002; Martinetti, 2000).

Sen defined capability as “the opportunity to achieve valuable combinations of human functionings - what a person is able to do or be” (Sen, 2005, p. 153). Further, he argued that well-being is best understood in terms of capabilities. Specifically, the greater a person’s capabilities, the greater is his or her well-being (Clark, 2005).

Sen (1992) described two core constructs that underlie the capability approach, functioning and freedom. Functioning is the actual achievement of the individual, that is, what he or she actually achieves through being or doing. Functioning is ‘beings and doings’ such as being nourished, being confident, or taking part in group decision making. Functioning ranges from basic capabilities such as being able to nourish and shelter oneself, and live healthily, to complex ones such as achieving self-respect, happiness and being socially integrated (Alkire, 2002). With respect to freedom, Sen viewed it as “a person's ability to get systematically what he would choose” (Alkire, 2002, p. 6). Thus for Sen, capability is the freedom to achieve alternative functioning combinations.

The capabilities approach and the central human functional capabilities

The core value underlying the capability approach developed by Sen (2004) is the enablement of people to achieve or extend their central capabilities. Sen’s priority in developing the capability approach was to provide a framework for what a person is able to do or be. Sen’s capability approach was deliberately incomplete (Alkire, 2002; Sen, 2004). His main concern was showing how the capability approach can be shared by scholars from a range of disciplines.

Relationship between the construct of occupation and capabilities related to the central human functional capabilities

In the context of occupational therapy, the capabilities approach provides a lens for viewing the construct of occupation and the tenets of occupation provide a lens for examining the ten central human functional capabilities articulated in the capabilities approach. Nussbaum’s (2000) Central Human Functional Capabilities include: Life; Bodily Health; Bodily Integrity; Senses, Imagination, and Thought; Emotions; Practical Reason; Affiliation; Other Species; Play; and, Control over One’s Environment’ (p. 78 – 80).

Occupation may be operationalised as the opportunity to achieve or extend these ten capabilities. The implications for framing the capabilities approach to the constructs of occupation are presented on Table 1. For each central human functional capability, examples are given for how the construct of occupation based on its three leading occupational therapy frameworks, could be operationalised.

The ten central human functional capabilities encompass both the person and context aspects of occupation. These capabilities can be characterised as person-centred and person/context-centred. Person-centred capabilities include those capabilities that focus on person-centred aspect of occupation such as life; bodily health; senses, imagination and thought; and, practical reason. Person/context-centred capabilities on the other hand are those capabilities that focus on both person-centred and context-centred aspects of occupation such as bodily integrity; emotions; affiliation; other species; play; and, control over one’s environment.

The perspective of occupation provides a vehicle for extending person-centred capabilities. In other words, occupation can be applied to reflect the capability of improving quality of life, having a healthy life expectancy, promoting health and managing lifestyle, accessing an appropriate level of nourishment, gaining employment, and housing, participating in self expressive and creative activities, planning one’s life, making choices, and using the idea of reflection to impact future choices.

Occupation can be considered an opportunity or a means of achieving or extending person/context-centred capabilities. Consistent with the central human functional capabilities, this conceptualisation includes being able to move freely from place to place, to be safe from violation, assault, discrimination, and abuses; to express feelings; to have attachments to family and friends; to manage stress and anxiety; to have meaningful relations and interactions; to improve communication skills; to have access to various environments; to develop friendships, social interaction, and participate accordingly; to promote relationships with animals, plants, and the world of nature; to have empathy for non-human beings; to experience spirituality as one would define it; to engage in leisure and recreational activities; to choose who’s governing you; to develop decision-making skills and speak up for yourself; and to adapt the environment to be as independent as possible.

Finally, the explicit human rights foundation of the capabilities approach may well be its principal strength when compared with the construct of occupation in occupational therapy. The values underlying the central human functional capabilities of the capabilities approach make human rights and social justice explicit. Thus, although highly congruent with the frameworks of occupation embraced by the occupational therapy profession, the capabilities approach and its ten central human functional capabilities extend their underlying value system, by its clear articulation of its human rights basis. This could be an important contribution to the field in that even in countries with traditions of human rights and social justice, marginalised groups could benefit from this perspective.
Table 1. Central human functional capabilities: Definitions, determinants, and implication in relation to occupation.

<table>
<thead>
<tr>
<th>Central human functional capabilities</th>
<th>Definitions</th>
<th>Determinants</th>
<th>Implication in relation to occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Life</td>
<td>The capability for physical survival.</td>
<td>Biomedical-physical</td>
<td>Opportunity, through occupation, to extend capability of living a normal life expectancy, and improving quality of life.</td>
</tr>
<tr>
<td>2. Bodily Health</td>
<td>The capability to have good health.</td>
<td>Biomedical-physical</td>
<td>Opportunity to engage in occupational possibilities to enhance health, to manage lifestyle, to access to appropriate level of housing, employment, and feeding and nourishment.</td>
</tr>
<tr>
<td>3. Bodily Integrity</td>
<td>The capability to move freely from place to place.</td>
<td>Biomedical-physical</td>
<td>Opportunity to achieve capability and occupational justice of being able to access the environments, and to be considered active members of society.</td>
</tr>
<tr>
<td>4. Senses, Imagination and Thought</td>
<td>The capability to use the senses; to imagine, think.</td>
<td>Emotional- psychological, spiritual, and cognitive-neurological</td>
<td>Opportunity, though the use of occupation, to achieve capability of being able to experience self-expressive and creative activities.</td>
</tr>
<tr>
<td>5. Emotions</td>
<td>The capability to form attachments to things and persons outside ourselves; to love those who love and care for us.</td>
<td>Emotional- psychological, cultural, and environmental</td>
<td>Opportunity to achieve capability of being able to express the feelings, to have attachments to family, and friends, to cope with stress and anxiety, to have meaningful relations and interactions, and to improve communication skills through, in and for meaningful occupational engagement.</td>
</tr>
<tr>
<td>6. Practical Reason</td>
<td>The capability to form a conception of the good and to engage in critical reflection about the planning of one's own life.</td>
<td>Emotional- psychological, spiritual, and cognitive-neurological</td>
<td>Opportunity to plan for one's own life and to make good choice's related to meaningful and purposeful occupation.</td>
</tr>
<tr>
<td>7. Affiliation</td>
<td>The capability to live for and towards others.</td>
<td>Cultural, environmental</td>
<td>Opportunity to achieve capability of being able for friendship, social relations, and empathy, compassion for situations, and social interaction and participation. Opportunity to engage in work occupations with people in a mutually respectful way.</td>
</tr>
<tr>
<td>8. Other Species</td>
<td>The capability to live with concern for and in relation to animals, plants and the world of nature. The capability for connection with nature and other species.</td>
<td>Spiritual, cultural and environmental</td>
<td>Opportunity to promote relation to animals, plants, and the world of nature, to have empathy for non-human beings, to improve spirituality, and to perform tasks in living and working environments.</td>
</tr>
<tr>
<td>9. Play</td>
<td>The capability for being able to laugh, to play, to enjoy leisure activities.</td>
<td>Emotional- psychological, cultural, and environmental</td>
<td>Opportunity to achieve capability of being able to engage in leisure and recreational activities as part of one's occupational life.</td>
</tr>
<tr>
<td>10. Control over one's environment</td>
<td>The capability for the exercise of control over environment, including political control.</td>
<td>Cognitive-neurological, cultural, and environmental</td>
<td>Opportunity to achieve capability of being able to choose who's governing you, to speak up for yourself, to adapt the environment to be as independent as possible for participation in occupations.</td>
</tr>
</tbody>
</table>
Narrative Review

Studies are needed to explore the views of occupational therapists including administrators, educators, researchers as well as clinicians, about the capabilities approach, and its ten capabilities and their congruence with established frameworks of occupation. Such studies will also help establish how the construct of capability in the context of the capabilities approach could extend the construct of occupation in the profession and potentially operationalised in practice.

Limitations
Consistent with the nature of reviews, the findings are constrained by the review process. To circumvent this issue, we derived our literature from established and seminal sources, with the occupational therapy related literature related to consensually agreed frameworks of occupation, and Nussbaum's seminal contributions related to the capabilities approach. To ground Nussbaum's work, we included the work of Sen who laid the foundation for this approach.

Conclusion
Within the occupation-related disciplines and health professions, the construct of occupation has been conceptualised largely within three frameworks: person-centred, context-centred, and person/context-centred. Because occupational engagement is neither linear nor predictable, an overarching view of occupation is compelling. This narrative review is a step towards elucidating the contribution of Nussbaum's ten central human functional capabilities subsumed in the capability approach, to elaborating the construct of occupation embraced by the profession of occupational therapy. Aligning the values of the capabilities approach to the construct of occupation recognises the equality of people in terms of their accessing occupational opportunities. The capabilities approach could provide a means of unifying the existing underlying constructs of occupation and related capabilities that are fundamental to occupational science.

In summary, we conclude that the key elements of the capabilities approach subsume and extend the values and tenets of existing frameworks of occupation with its attention to human right and social justice. The capabilities approach constitutes a basis for debate and discussion within the occupation-related disciplines and health professions.

Key points
- The capabilities approach extends the three key methods of conceptualising occupation in ways that could be useful to the profession.
- How Nussbaum's central human functional capabilities may be translated into basic assessment and intervention warrants development.

References
Do Nussbaum's ten central human functional capabilities extend occupational therapy's construct of occupation?  

Narrative review


