Comparing and Using Occupation-Focused Models

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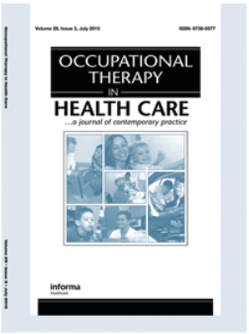

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Comparing and Using Occupation-Focused Models

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ABSTRACT. As health care moves toward understanding the importance of function, participation and occupation, occupational therapists would be well served to use occupation-focused theories to guide intervention. Most therapists understand that applying occupation-focused models supports best practice, but many do not routinely use these models. Barriers to application of theory include lack of understanding of the models and limited strategies to select and apply them for maximum client benefit. The aim of this article is to compare occupation-focused models and provide recommendations on how to choose and combine these models in practice; and to provide a systematic approach for integrating occupation-focused models with frames of reference to guide assessment and intervention.

KEYWORDS. Canadian Model of Occupational Performance and Engagement, Model of Human Occupation, Occupation-based, Occupation-focused, Person-Environment-Occupation-Performance Model

INTRODUCTION

Occupation is a central concept within the domain of occupational therapy (AOTA, 2014). However, a brief overview of history has taught us that the centrality of *occupation* in the profession cannot be taken for granted (Duncan, 2011; Kielhofner, 2009; Leclair, 2010; Ludwig, 2004). In the last 50 years, the profession's focus on occupation has waxed and waned with socio-political movements and shifting professional priorities. Originally founded on humanistic values, occupational therapy emphasized occupation as the positive engagement between the person and the environment to influence overall well-being (Ludwig, 2004; Reed, 1984). Subsequently, Friedland (1998) described occupational therapy as a profession that lacked confidence and "abdicated our role in developing and maintaining health and well-being through occupation in order to join the ranks of the reductionists" (p. 378). In the 1970s and 1980s, occupational therapy theorists reinforced the importance of refocusing on occupation, sparking the development

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of occupation-focused frameworks and models (Kielhofner, 2009; Ludwig, 2004; Turpin & Iwama, 2011).

The challenge for occupational therapists to continue to be experts in *occupation* remains in the age of changing healthcare system priorities (Wood, 1996). For example, the International Classification of Functioning, Disability, and Health (ICF) developed by the World Health Organization (2002) gave healthcare professionals the push to move from an impairment-focused perspective to a focus on achieving participation or engagement while removing barriers that lead to "activities limitation and participation restriction" (p. 6). On one hand, this shift has given external validation to the profession's central concept of occupational participation. The profession as a whole continues to focus on contextualized functional rehabilitation as seen in more contemporary models and research (e.g., Toglia's (2005) Dynamic Interaction Model, Mathiowetz and Haugen's (1994) Functional Task Oriented Approach). However, we are not the only profession that now prioritizes the importance of person, environment, and occupational participation in regards to health:

> *By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health care professionals as the practitioners of choice to whom consumers have direct access for the diagnosis of, interventions for, and prevention of impairments, activity limitations, participation restrictions, and environmental barriers related to movement, function, and health. (American Physical Therapy Association, 2012)*

Therefore, for occupational therapy to stay at the forefront of its unique knowledge, evidence-based theories and models of practice need to be constantly championed and applied in all domains of practice (Wood, 1996).

The ability to synthesize and apply occupational concepts is what uniquely distinguishes occupational therapy from other health professions (Ludwig, 2004; Nelson, 1996). Ashby and Chandler (2010) found that in 65 occupational therapy academic programs across Australia, Canada, the United Kingdom and the United States, the top three occupation-focused models included in curricula were the Canadian Model of Occupational Performance and Engagement (CMOP-E) (98.5%), the Model of Human Occupation (MOHO) (98.5%), and the Person-Environment-Occupation-Performance Model (PEOP) (81.5%). Respondents reported that these models were chosen to be part of program curriculum based on (1) evidence in the literature and (2) "perceived use in practice" (Ashby & Chandler, 2010, p. 620). Even though these occupation-focused models are taught and used, there is a paucity of critical reviews of the models (Ashby & Chandler, 2010; Duncan, 2011).

Factors affecting the clinical application of occupational concepts, models, and interventions include the therapist's lack of understanding of theoretical concepts as well as a lack of consensus and consistency in the use of the these concepts (Lee et al., 2009; Nelson, 1996; Wood, 1996). Detailed discussions have appeared in the literature concerning the nuance of occupational concepts, such as the differences between *occupation-focused, occupation-centered* and *occupation-based* (Fisher, 2013). Reiterating these discussions is beyond the scope of this article, suffice to say

that different authors have different definitions of the terms, which has contributed to therapists' difficulty in articulating and applying these critical concepts (Ludwig, 2004). For the purposes of this paper, *occupation-focused models* "provide an overarching context of occupation that emphasizes the occupational therapist's unique perspective on a client's ability to engage in activities and participate in life" and "attempt to explain the relationship of occupation, person and environment" (Cole & Tufano, 2008, p. 61). These models are derived in large part from behavioral and social psychology, developmental, humanistic, and systems theories (Cole & Tufano, 2008). Later in the paper, we will also refer to *frame of reference*, which is "a system of compatible concepts from theory that guide a plan of action for assessment and intervention within specific occupational therapy domains" (Cole & Tufano, 2008, p. 62). Examples of common frames of reference include *biomechanical* and *sensory integration,* which focus on the underlying components contributing to occupational performance, and are based more in biological than social sciences (Cole & Tufano, 2008). It is important to also note various authors who have added to this discussion on occupation-focused models. In particular, Reed (1984) provided an extensive discussion of outlined various elements and conceptualizations of occupational therapy models as well as models from related fields. A practical workbook by Law, Baum and Baptiste (2002) was created to fill the need of helping professionals integrate occupation-based models into client-centered practice, particularly with the end goal of occupational performance. Ludwig (2004) presented six occupational therapy models including MOHO and PEOP, especially emphasizing the contextual importance and interventional application of each model. Turpin and Iwama (2011) have also presented a thorough discussion of nine occupational therapy models but do not discuss how to integrate them with each other or with frames of reference.

This paper provides an update of what was discussed by Ludwig (2004) and Turpin & Iwama (2011) to include comparisons of more recent versions of the models as well as to provide an expanded discussion of using occupation-focused models together and with frames of references. Also, we argue that models no longer only focus on occupational performance as the single end goal and occupational therapy needs to reflect that in clinical application. Newer editions of models have nuanced differences that include an expanded understanding of occupational goals beyond performance that can guide practice.

For the purposes of this paper, we will aim to (1) describe, review, and compare three occupation-focused models of practice and (2) propose ways to integrate the knowledge for practical implementation. A decision was made to limit the number of models for critical review in order to allow for more in-depth analysis and comparison. The CMOP-E, MOHO, and PEOP were chosen for review as they appear to be the most frequently taught, and perceived to be commonly used in selected Western countries (Ashby & Chandler, 2010). As far as we are aware, this is the first paper that compares and integrates these three models in practice. We will compare these models using Kielhofner's (2009) framework of *conceptual practice models*, which defines models as having theory, research evidence, and practical tools (p. 13). Therefore, first, we will use this framework to explore the (1) theoretical focus, (2) research, and (3) practical tools of the three occupation-focused

models. Second, we will provide examples of how the models can be combined and applied in clinical practice, along with selected frames of reference.

BACKGROUND OF THE MODELS

While each of the three occupation-focused models that are the focus of this paper are built on social sciences such as from psychology, sociology, and anthropology, they also incorporate constructs from education, disability studies, social justice philosophy, human ecology, and the International Classification of Functioning, Disability, and Health (ICF) (Townsend & Polatajko, 2007: Kielhofner, 2008; Christiansen, Baum & Bass-Haugen, 2005). Occupational therapy theorists and model builders combine the knowledge from these multiple fields into cohesive models that address the needs of occupational therapy recipients and practitioners. Selecting and integrating concepts from other fields with occupational therapy's core values and principles has provided a substantive occupation-focused base for the three models that are the focus of this paper.

The Canadian Model of Occupational Performance (CMOP) was developed by the Canadian Association of Occupational Therapists (CAOT) as part of the national association's effort to create practice guidelines. There was a series of five consensus guidelines (CAOT, 1991, 1993; Department of National Health and Welfare & CAOT, 1983, 1986, 1987) which led to the publication of two books detailing the model and its application (CAOT, 1997, 2002). The influence of different authors of the model can be seen in the introduction of the core concepts of *enablement* (Polatajko, 1992), *social justice* (Townsend, 1993), and *environment* (Law, 1991) in the first iteration of the model (CAOT, 1997). Enablement is viewed as "a model of helping that promotes empowerment," and "as the positive form of the term disablement" (Polatajko, 1992, p. 196). Social justice is the "vision and everyday practice in which people can choose, organize, and engage in meaningful occupations that enhance health, quality of life, and equity in housing, employment, and other aspects of life" (CAOT, 1997, p. 182). Social justice is viewed as linked to empowerment and enablement. Environment is considered broadly, and includes "cultural, institutional, physical, and social elements that lie outside of individuals, yet are embodied in individual actions" (CAOT, 1997, p. 180). This model attempted to provide resources for client-centered practice, which emphasized a collaborative partnership between the therapist and the client while enabling occupation (CAOT, 1997, p. 180). In 2007, the CMOP model was expanded to include engagement as the desired outcome, becoming the Canadian Model of Occupational Performance and Engagement (CMOP-E, Townsend & Polatajko). The goal of creating the CMOP-E was to expand upon the well-received CMOP to include elements of performance that had not been explicit in the first model, such as the level of importance the performance holds for the person and satisfaction with performance. The expanded model reflects a broader scope of practice, one more focused on creating supportive environments and advancing a vision of health, well-being, and justice (Polatajko et al., 2007).

The MOHO has the longest history of publication and is a widely used occupation-focused model (Kielhofner & Burke, 1980; Lee, 2010; Lee et al., 2008; Turpin & Iwama, 2011). During the 1970s, Mary Reilly warned of the problems of

adopting the reductionistic approach similar to the medical model, which reflected in a shift of focus from health and well-being to impairments and remediation (Kielhofner, 2009; Ludwig, 2004). Kielhofner, Reilly's student, developed MOHO in response to the profession's shift toward an alignment with the biomedical model of health. Although Reilly's model of occupational behavior (OB) was foundational in the development of MOHO, Kielhofner's model is significantly different as MOHO expanded the concepts of OB into a dynamic view of human occupation using general systems theory while OB conceptualized human occupation on a developmental continuum (Cole & Tufano, 2008; Kielhofner, 1985, 2008). Since its conceptualization, the model has undergone substantial changes supported by other strong influences, such as the social model of disability (Kielhofner, 2005) and research efforts as reflected in the 4th edition of the model (Kielhofner, 2008).

The Person-Environment-Occupation-Performance Model (PEOP) was developed in 1985 although not published until 1991. It was also developed in response to a need for more occupation-focused models during the reductionistic paradigm (Christiansen & Baum, 1991, 1997; Christiansen et al., 2005). It is claimed to be conceptually similar yet different from other models in terms of its emphasis on occupational performance and participation, as well as using a top-down approach (Christiansen et al., 2005). The latest edition is designed to help therapists identify the client's resources and barriers to occupational performance, and can be applied to not only individuals but also organizations and communities (Christiansen et al., 2005). Over time, the PEOP model has changed the definitions of presented concepts of personal and environmental factors that affect the resulting interaction called "occupational performance and participation" (Christiansen et al., 2005, p. 245).

MODEL COMPONENT COMPARISONS

All the models will be compared in terms of their emphasis on person, environment and occupational focus. While it is essential to learn the models in depth through the texts (Christiansen et al., 2005; Townsend & Polatajko, 2007; Kielhofner, 2008), we believe that authors have thoughtfully created their schematics to give a coherent and succinct picture of important aspects of their models and therefore, they will be important points of reference. Figures 1, 2 and 3 show the different schematics of each model, which represent an overview of the models.

View of the Person

The focus of CMOP-E on the client is consistent with the fundamental principles of client-centered practice, social justice and enablement (Townsend & Polatajko, 2007; Turpin & Iwama, 2011). The person is comprised of "cognitive, affective, and physical" performance components with "spirituality at the core" (Townsend & Polatajko, 2007, p. 23). Spirituality is defined by the model's creators as "a pervasive life force, source of will and self-determination, and a sense of meaning, purpose and connectedness that people experience in the context of their environment" (CAOT, 1997, p. 183). The focus on spirituality is consistently represented in the schematic, which places the person, as a spiritual being, central and proportionately large in the schematic representation (see Figure 1). The performance components

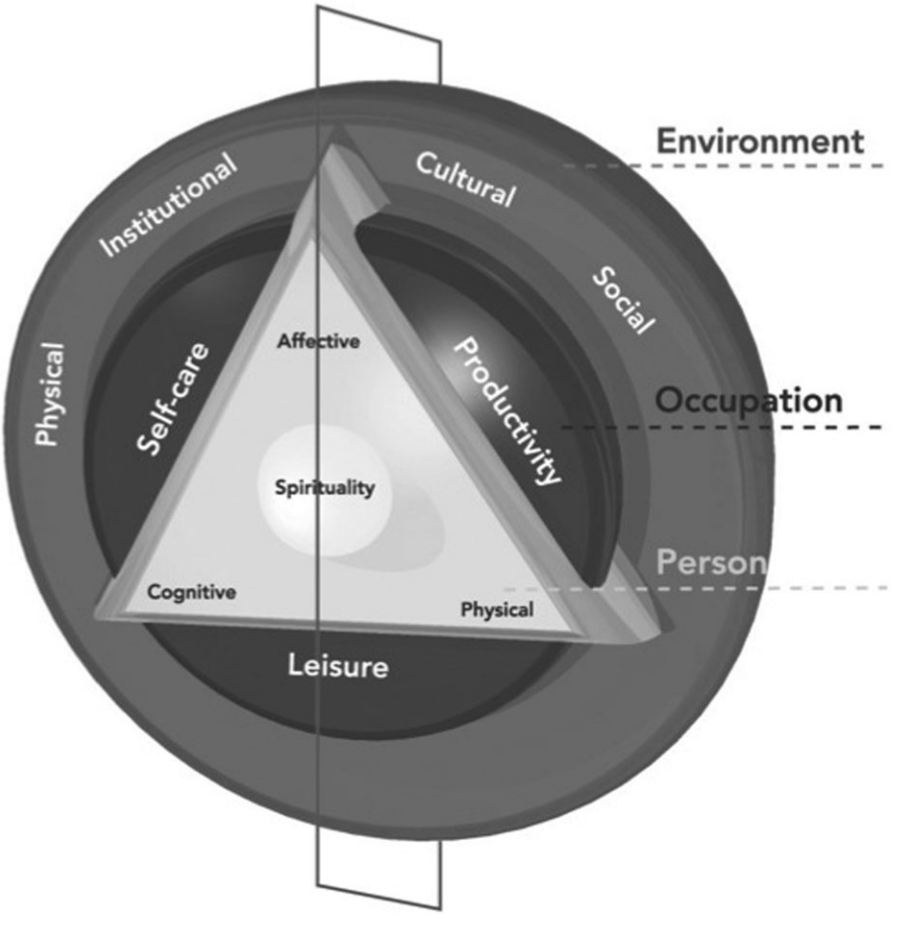

FIGURE 1. Canadian Model of Occupational Performance and Engagement. *Source:* Polatajko, Townsend, & Craik, 2007.

are prominent and placed over concentric circles of occupational areas and the environment.

The MOHO has a strong emphasis on a person's dynamic intrinsic adaptation resulting from occupational participation. There is also a focus on the client as a dynamic agent of change and mastery over the environment. The unidirectional arrows in the schema represent both agency and adaptation (see Figure 2). The illustration shows agency through depicting the personal aspects (volition, habituation and personal capacity) affecting skills, occupational performance and occupational participation, which contribute to occupational adaptation in the environment (Kielhofner, 2008, p. 108).

The PEOP model provides a framework of five dimensions of a person, including psychological, neurological, spiritual, physiological and motor factors, in the context of occupational performance and participation (Christiansen & Baum, 1997). By analyzing these factors, the authors emphasize how therapists can

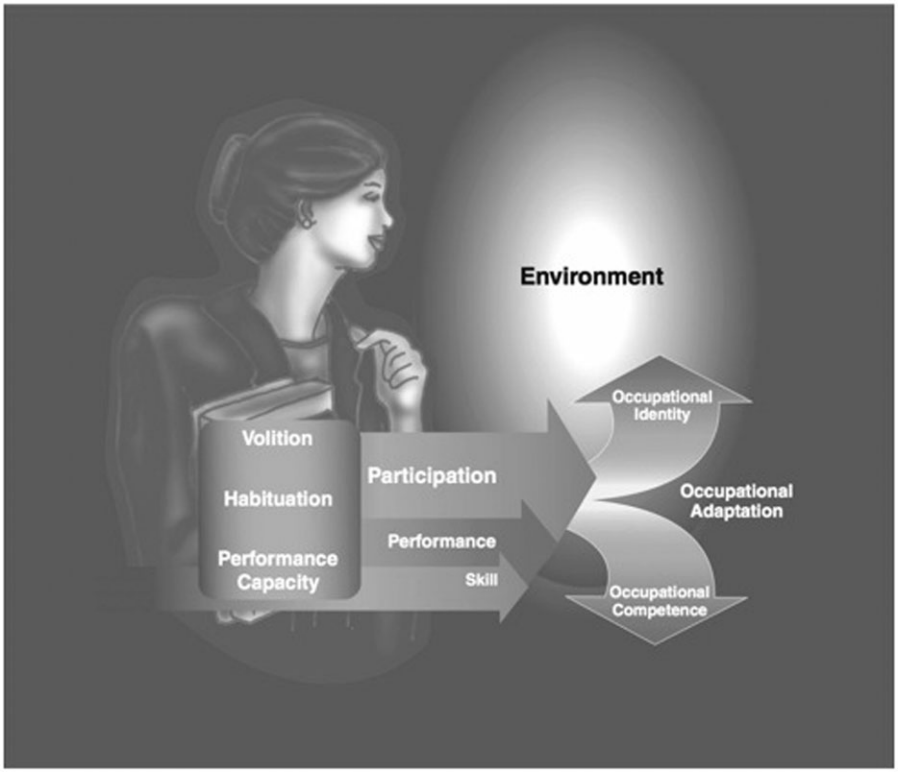

FIGURE 2. Model of Human Occupation. *Source:* Kielhofner, 2008.

determine a person's strengths and limitations across these five dimensions (Christiansen et al., 2005). However, the emphasis on factors, as depicted in the schema, could overshadow the desired top-down philosophy, which emphasizes occupational performance and participation (see Figure 3).

Overall, CMOP-E and MOHO arguably emphasize the importance of the person more than PEOP. CMOP-E and MOHO "construe the self as being not only focally situated in the center of all concerns, but also understood to be rationally separate and superior in power and status to the environment and nature" (Iwama et al., 2009, p. 1126). Although both CMOP-E and PEOP focus on analyzing the personal components to improve the fit for performance, CMOP-E emphasizes spirituality as the main essence of the person while PEOP depicts spirituality as one of the five components. The focus in MOHO is on understanding and developing the person's motivation for occupation, with the assumption that skills, performance and ultimately adaptation, will follow.

View of the Environment

CMOP-E emphasizes the importance of addressing social change, especially when it comes to addressing issues of social inequalities and occupational disparities (Townsend & Polatajko, 2007, p. 155). Therefore, as a therapist considers the fit

FIGURE 3. Person-Environment-Occupation-Performance Model. *Source:* Christiansen, Baum, & Bass-Haugen, 2005.

between the individual and the environment, the therapist is encouraged to not only address the immediate social and physical context of the individual but also actively incorporate the interplay of concurrent institutional and cultural factors. As a result, the schema details the environmental factors equally within the outer concentric circle, representing the context in which occupation occurs (Townsend & Polatajko, 2007, p. 23).

The environmental factors (e.g., objects, spaces, occupational forms, social, cultural, and political demands) are described in MOHO in terms of environmental demands and impact (Kielhofner, 2008, p. 21). Historically, the environment has been a critical part of the model, which was influenced significantly by systems theory (Kielhofner, 1985, 1995). However, the current MOHO schema represents the environment as nebulous, always surrounding but not affecting the person unlike the previous editions that depicted an open feedback system. Although the dynamic between the environment, person and occupation is emphasized in the text, there is a significantly reduced conceptual reference to systems theory in the latest edition, as contrasted with earlier editions (Kielhofner, 1985, 1995, 2008).

PEOP emphasizes the environment in terms of whether it "enables or acts as a barrier to performance" (Christiansen et al., 2005, p. 223). This is similar to CMOP-E concerning the concept of fit between person and environment and appears to give equal importance to both personal and environmental factors in the assessment and intervention processes (Christiansen et al., 2005). Therefore, the schema

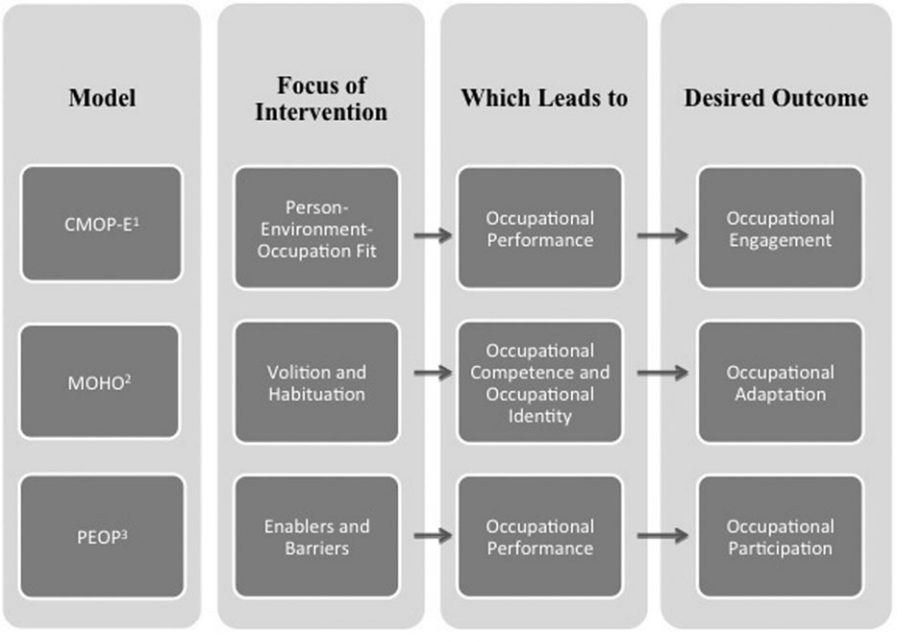

FIGURE 4. Summary comparing the three models.

appears consistent with this concept and depicts the person and environmental factors on opposing sides, with occupational performance and participation in the middle (see Figure 3).

Occupational Focus

Traditionally, occupation-focused models have had a strong emphasis on occupational performance. *Occupational performance* is defined similarly across the three models as the "doing" (Christiansen et al., 2005, p. 246; Kielhofner, 2008, p. 103) or "execution" (Townsend & Polatajko, 2007, p. 26) of an activity. In recent editions of all the models, there has been a widening of the focus of occupational therapy beyond occupational performance (see Figure 4).

In CMOP-E, the authors emphasize *occupational engagement* and experience, which includes a broader understanding of cognitive and emotional involvement in performance (Townsend & Polatajko, 2007; Turpin & Iwama, 2011). Occupational performance is an active means to engagement. However, "humans frequently engage in occupations without performing them" (Townsend & Polatajko, 2007, p. 26) such as passively watching a sporting event or engaging in a theatrical or musical experience. These concepts are not explicitly represented in the CMOP-E schema but are elaborated as the ultimate goals of therapy.

MOHO focuses on intrinsic development and change, known as *occupational adaptation* (Kielhofner, 2008; Turpin & Iwama, 2011). Occupational adaptation is

the "outcome of a positive occupational identity and achievement of occupational competence" (Cole & Tufano, 2008, p. 96). MOHO dedicates much of its model to understanding and developing a person's occupational identity (sense of occupational self) as well as occupational competence (the ability to participate in occupational routines and roles) in order to facilitate adaptation to the dynamic demands of occupational life patterns. The schema depicts occupational adaptation as a unidirectional consequence of personal and occupational processes, but it is important to be reminded of the dynamic interplay of these processes with the environment.

PEOP emphasizes the need for competence in occupational performance in order to attain occupational participation. *Occupational participation* in PEOP is broader than occupational performance as it encompasses the ability to act upon desired lifestyle choices to participate in meaningful and purposeful roles and activities (Christiansen et al., 2005). The schema shows consistency with this in view that occupational performance and participation are the occupational foci by placing these concepts strategically in the center of the model.

CMOP-E and MOHO are considerably more detailed in terms of the breath of occupational concepts and processes compared to PEOP. It appears that PEOP has the most simplified view of occupational processes, mainly occupational performance and participation (Christiansen et al., 2005, p. 245). Overall, both CMOP-E and PEOP focus on occupational performance as a means to occupational engagement or occupational participation, respectively. MOHO is most unique in the sense that crux of human occupation is to affect occupational identity and competence, thus resulting in positive occupational adaptation (See Figure 4).

RESEARCH AND PRACTICAL TOOLS

It appears that the bulk of the research that is relevant to the CMOP-E is focused on the associated assessment tool, *Canadian Occupational Performance Measure* (COPM) (e.g., Colquhoun et al., 2010; Eyssen et al., 2011; Larsen & Carlsson, 2012). A systematic review by Parker and Sykes (2006) found 64 journal articles on the COPM, the assessment tool developed based on the earlier guidelines in 1987 (Law et al., 2005). However, most of the research and development of the model itself, CMOP-E, is presented in the CAOT published practice book guidelines (CAOT, 1997, 2002; Townsend & Polatajko, 2007) as well as earlier published documents (CAOT, 1991, 1993; DNHW & CAOT, 1983, 1986, 1987). MOHO is acknowledged as the most researched model among the occupation-focused models (Ashby & Chandler, 2010, Turpin & Iwama, 2011). A literature review revealed the difference in research quantity of various occupation-focused models among which 433 peer-reviewed journal articles focused on MOHO while 27 related to PEOP (Lee, 2010).

Assessments

The range and content of assessments associated with a specific model exemplify the values and principles of the model. As all these models are occupation-focused, it is not surprising that the assessment tools emphasize occupational concepts rather than analysis of performance components.

The COPM is the only assessment tool developed along with the CMOP. This assessment, widely used as a screening tool and outcome measure, breaks occupa-

tional performance down into three occupational areas that are commonly known as self-care, productivity and leisure. However, it has not been revised since 2005 (Law et al., 2005); therefore, it has not included the CMOP-E's more recent emphasis of occupational engagement. To ensure that therapists do not limit their understanding to the older model without the element of engagement, the authors may need to revise this.

It is widely known that MOHO is the most developed model in terms of practical resources. MOHO has over 20 assessments which serve a wide range of purposes from screening to identifying issues related to specialized areas such as school system practice and work rehabilitation (Kielhofner, 2008, 2009). Developing practical tools as part of MOHO was always a priority (Kielhofner, 2008, 2009). This is not to say that therapists who use MOHO do not use any other assessment tools. However, in terms of keeping consistent with MOHO developed concepts of occupational narrative, occupational identity and occupational adaptation, there are not many other assessment tools available that assess these concepts. The assessment dissemination site, MOHOWeb (www.cade.uic.edu/moho/), provides a user-friendly guide for assessment selection based on the client's age, method of information gathering (interview, observation, self-report, or combination), client's disability, and purpose of the assessment.

The PEOP provides guidelines on selecting assessment measures but does not have any specific assessments developed (Christiansen et al., 2005; Lee, 2010). The Activity Card Sort (Baum & Edwards, 2008) and the Executive Function Performance Test (Baum et al., 2008) are examples of assessments based on PEOP principles but not officially developed as PEOP assessments. The authors explicitly encourage the therapist to use other readily available assessment tools with this model. There is a whole chapter in the larger text by Christiansen et al. (2005) that details examples of assessment tools that are readily available in the market. Leaving the choice of assessments to the user, while providing flexibility, may create a challenge for the novice practitioner who may not have the clinical expertise to choose appropriate assessments that reflect the PEOP's guiding principles.

Guidelines for Therapy

All models have a guide or framework for the therapeutic process. The CMOP-E's *Canadian Practice Process Framework* (CPPF) has subtle differences from MOHO's *six steps of therapeutic reasoning* such as MOHO's emphasis on systematically gathering client information using theory-based questions and CMOP-E's emphasis on the societal context. The *Canadian Model of Client-centered Enablement* (CMCE) presents core skills for *enabling occupation* (Townsend & Polatajko, 2007), while MOHO has a descriptive chapter on skills that are relevant for enabling *change* as its focus is on occupational adaptation (Kielhofner, 2008). The PEOP provides "key elements of a plan of care" (Christiansen et al., 2005, p. 376) but does not do it in a step-by-step fashion, as the authors believe it is a dynamic process. It focuses the planning on the information gathering process through what is known as *situational analysis*.

In providing these guidelines, subtle differences are seen. First, both the CMOP-E and PEOP focus more on the therapeutic *process* between the therapist and client (i.e., the question of "what should I do?") while MOHO focuses on therapeutic

reasoning within the therapist (i.e., the question of "what do I think about this?"). CMOP-E is the strongest in emphasizing the importance of the start and closure of the therapeutic relationship as depicted in both the CPPF and CMCE. Second, it appears that both MOHO and PEOP guidelines are more strength-focused compared to the CMOP-E. The MOHO's "6 steps of therapeutic reasoning" emphasizes looking for "strengths and problems/challenges" (Kielhofner, 2008, p. 417) and PEOP uses similar terms in the situational analysis diagram such as finding "capabilities/enablers" as well as "constraints/barriers" (Christiansen et al., 2005, p. 380) as part of the assessment process. However, the CPPF does not specify identifying strengths, nor does the COPM. Finally, while MOHO only provides guidelines for working with individuals, the PEOP and CMOP-E both provide guidelines for their usage in organizations and communities, which is useful in the growing trend of occupational therapists working with communities and populations.

Applying Different Models in Practice

A therapist using CMOP-E focuses on enabling occupation through identifying gaps between desired and actual occupational participation, such as with the use of the COPM as it identifies performance and satisfaction scores (Law et al., 2005). Therapeutic approaches to bridge the gaps that prevent optimal occupational performance include remediation, or establishing/restoring ability or skill (AOTA, 2014) as well as compensation, teaching strategies to offset difficulties in performance (AOTA, 2014). The use of environmental adaptation, including the modification of the environmental context or task demands to support performance, is emphasized in the CMOP-E. The therapist may ask for feedback to assess whether the client is having a positive emotional experience of therapy. Enabling occupation involves the therapist taking on various untraditional occupational therapy roles, such as being an advocate for social justice if there are barriers in the larger socio-cultural environment (Townsend & Polatajko, 2007).

A therapist using MOHO may focus on assessing the person's current self-perceived level of functioning to inform interventional goals. The assessment is not focused on gaps but on volition, especially a client's belief in self and motivation for occupation. Therapy will be more focused on providing opportunities for therapeutic success and growth of self-awareness of what one can do (Kielhofner, 2008) instead of focusing on environmental change. The therapist will assess the person's ability to adapt to the dynamic nature of aspects of the environment. The therapist, in partnership with the client, will also consider how environmental resources can be used to support enacting desired roles and interests. Intervention will also be focused on creating life patterns that improve the person's identity and competence as an occupational being (Kielhofner, 2008). There is emphasis on dynamic adaptation, which may be seen in grading of tasks and performing tasks in different environments (Kielhofner, 2008).

A therapist using PEOP will focus on identifying enablers and barriers within person and environmental factors in order to optimize occupational participation (Christiansen et al., 2005). There appears to be equal emphasis on both types of factors and, therefore, the therapist should consider remediation, compensation, and environmental modification as part of the intervention plan. Selection of assessment approaches therefore may be variable as long as they serve the pur-

pose of identifying areas of intervention. As PEOP was created as an organizing framework, other models or frames of reference are drawn upon (Christiansen et al., 2005).

Choosing and Combining Models

After understanding the foundational aspects and uniqueness of each model, one of the challenges that remains is integrating the theories in practical situations. Factors that have been identified in how one selects and uses theoretical models include educational bias, a sociocultural influence of the occupational therapy work environment and exposure during conversations with other therapists (Lencucha et al., 2008; Melton et al., 2010), as well as continuing education lectures and workshops. It is imperative that therapists do not just "go with the flow" or claim "eclectic" use of models but attempt to critically analyze available models in terms of their concepts, research evidence and practical use. It may be common to find that one model may not suffice all the time and occupation-focused models can be used to supplement each other.

Ikiugu and colleagues described a systematic way of combining the use of different conceptual models of practice that can be useful (Ikiugu, 2007; Ikiugu et al., 2009). He proposed that a therapist could start with an *Organizing Model of Practice (OMP)* "to guide the overall assessment and treatment planning process" (Ikiugu & Smallfield, 2011, p. 438). Assessment tools or intervention strategies may be borrowed from other models known as Complementary Models of Practice (CMP) as needed if deemed complementary to principles of the OMP. As treatment progresses, CMPs may change or different elements of them may be added or removed. This method may be useful for integrating occupation-focused models and frames of references with each other to ensure that therapists treat holistically.

Choosing and Combining Occupation-Focused Models

In certain situations, it may be appropriate to choose two occupation-focused models that are complementary in approach. For a client with a recent below-knee amputation who lives on his own, the goal of therapy may be for the client to be safe and independent in his own home. MOHO may be chosen as the OMP to first assess the client's personal causation and habituation to ensure that therapy is individualized by incorporating his roles, interests and priorities. The model is useful to understand how this amputation may have affected both occupational competency and identity. PEOP may be chosen as the CMP to better guide assessment of which environmental factors are present as enablers or barriers to performing activities independently.

Occupation-focused models are generally applicable to all occupational therapy services. Some therapists choose their models according to diagnostic or specialty groups. Best practice requires that therapists thoughtfully choose the models that fit their views of the purpose and focus of therapy, as well as support their ability to understand and explain the specific challenges faced by their clients (Kielhofner, 2009). The therapists should consider whether the priority is short-term improvement in performance components and skills, or long-term occupational adaptation and engagement issues. Subsequently, the model may change for intervention after *goals* are set.

An example may be a school therapist treating a child who has high functioning autism spectrum disorder and a sensory processing disorder may find that the immediate goal is to improve occupational performance. If the immediate focus is on adapting the classroom, training a classroom aide and advocating for the child, CMOP-E may be selected as the organizing model of practice. However, MOHO may be a useful model in the long-term, when the overarching goal shifts to building self-efficacy and a positive occupational identity as a student and friend in the school setting, leading to occupational adaptation.

Combining Occupation-Focused Models with Frames of Reference

As occupational therapists seek to be more occupation-focused, it would be advisable that the organizing model of practice be an occupation-focused model rather than a frame of reference, which guides assessment and intervention in a specific domain such as biomechanical function or sensory processing. It is perhaps easier to use a frame of reference for the main model when the focus is on assessing and treating deficits. However, that may divert our attention to being more impairment-focused and unable to then treat our clients as holistically as possible. For example, an occupational therapist working in hand therapy may be focused on using a biomechanical frame of reference as the main model with an occupation-focused model such as PEOP as the complementary model. The emphasis on the biomechanical frame of reference directs the focus of assessment and intervention on range of motion, grip strength or regaining joint flexibility as primary goals with a secondary goal of returning to activities of interest. The therapist may consider how personal and environmental factors affect occupational participation with the PEOP framework. However, as the biomechanical approach is impairment-focused, the therapist may not use PEOP at the beginning of the therapy encounter to address overarching occupational goals and issues of participation in therapy. A therapist who begins with an occupation-focused model as the organizing model of practice will have gathered essential information about occupational roles and priorities up front, and will be reminded to ensure that therapy sessions reflect client-centered goals and interests. Blending the impairment-focused frame of reference with models that address issues of learning and motivation in the context of occupation is recommended (Schell & Gillen, 2014). This client-centered therapy focus fits well with the recent emphasis on patient-centered measures of satisfaction in healthcare (Manary, Boulding, Staelin, & Glickman, 2013).

If a certain frame of reference is required to assess and treat (e.g., biomechanical), by making an occupation-focused model the organizing model of practice, the therapist would start with a top-down approach. The therapist would use an occupation-focused assessment (e.g., Occupational Self-Assessment, Canadian Occupational Performance Measure, and Activity Card Sort) or at least a brief client-centered and occupation-based interview with the client on what his/her concerns are and what is important to him or her, to assist in the development of an occupational profile (AOTA, 2014). If necessary, it may be more appropriate to use an assessment that can rely on observations, such as the Volitional Questionnaire or the Model of Human Occupation Screening Tool (Kielhofner, 2008), with the foundational understanding of client-centeredness. This occupation-centered approach will assist the therapist in determining how to prioritize his or her efforts as well as

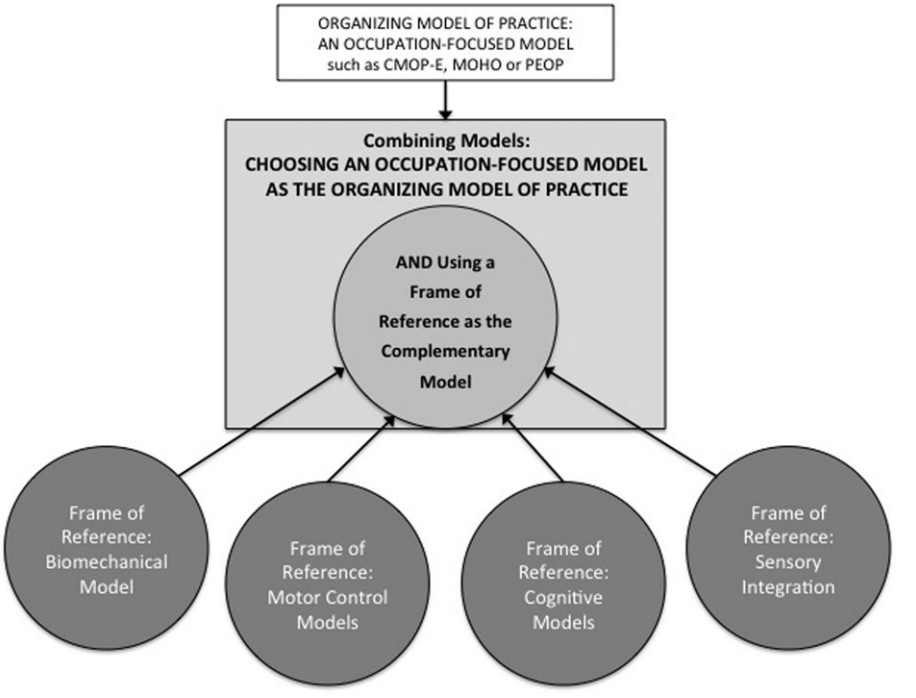

FIGURE 5. Combining organizing and complementary models of practice.

to understand what will be motivating for that client. Having an occupation-focused top down approach will place the component level intervention in a broader occupational context (see Figure 5).

It is notable that some settings and clients will not require a combination of occupation-focused models with frames of reference. However, there may be a need to incorporate related knowledge from fields outside of occupational therapy. For example, a client with a psychiatric diagnosis who has difficulty carrying out valued roles may be well served by the Model of Human Occupation with related knowledge from psychology, such as cognitive behavioral therapy or psychodynamic theory.

Limitations

We acknowledge that this paper has its limitations for various reasons. First, although we attempt to compare the top three models found to be taught internationally (Ashby & Chandler, 2010); these models are not used to the same capacity in every country or culture. There were countries that were not included in the study by Ashby and Chandler (2010), such as from the regions of Europe and Asia, which may limit the extent to which these three models are widely used. The response rate of 33.8% to the survey by Ashby and Chandler (2010) may have skewed the results. Therefore, we acknowledge that there may be models that are more familiar and advantageous in certain countries and cultures. The three chosen models may not meet the needs of all clients, especially clients from non-Western cultures.

For example, the Kawa model has attempted to address the cultural limitations of Western-centric models and is, therefore, possibly more applicable and used in collective societies (Iwama et al., 2009; Turpin & Iwama, 2011). Some models may have been used extensively in some countries but were not included in this study, such as the Occupational Therapy Intervention Process Model (Fisher, 1998).

Second, the more recent models, especially CMOP-E and MOHO, have developed various terminologies about occupational concepts and processes that are unique to the model itself while the labels are not. Definitions of occupational concepts differ, at times posing confusion to therapists who communicate with different models in mind. For example, *occupational participation* and *occupational competency* have subtle differences across models (Christiansen et al., 2005, p. 245, p. 252; Cole & Tufano, 2008, p. 101, p. 107; Townsend & Polatajko, 2007, p. 26). The reason behind these differences cannot be addressed fully in this article as it represents a philosophical debate regarding differing worldviews. This is a limitation and also not the purpose of this paper to tease out every nuance of terminological definitions. However, we hope that this paper will spark an appreciation for the unique contributions that each model brings to our understanding of occupation. At the same time, we hope to encourage discussion in murky areas that require further clarity and development.

CONCLUSION

There are various occupation-focused models available but therapists have found theoretical models challenging to understand and use in their practice. The CMOP-E, PEOP, and MOHO models were presented and compared as they are the most widely used and taught occupation-focused models in occupational therapy in selected Western countries. Each model was found to have a different emphasis in terms of person, environment, occupation, and desired outcome. It is important that occupational therapists understand and use occupation-focused models as the basic premise of assessment and intervention rather than basing treatment solely on frames of reference. A systematic eclectic guide (Ikiugu & Smallfield, 2011) was proposed as a way to integrate occupation-focused models of practice and frames of references into clinical practice. Additional work to increase awareness and development of these models and to investigate how they are taught and used is strongly encouraged.

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