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## Are we Missing Opportunities? How Occupational Therapists Would Benefit from Connecting Mindfulness to Occupational Participation

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## Are we Missing Opportunities? How Occupational Therapists Would Benefit from Connecting Mindfulness to Occupational Participation

### Comments

The authors report that they have no conflicts of interest to disclose.

### Keywords

occupational therapy, mindfulness, participation, daily occupations

### Credentials Display

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Mindfulness appears in the news, popular media, and various research endeavors as a concept, practice, and intervention. It often serves as a stand-alone intervention to address our current health status as a nation and the alarming rise in the rate of mental and behavioral health diagnoses, in particular. Though there are a variety of professionals who facilitate mindfulness, the authors suggest that occupational therapists are well-positioned to be primary providers for mindfulness interventions that can be embedded in authentic, client-driven daily occupations. The relationship between mindful engagement in occupations and inherent meaning in the act of doing has been explored by several authors who recognize the importance of the relationship to both motivation in doing and satisfaction with certain occupations (Elliot, 2011; Reid, 2009; Wright et al., 2014). In fact, authors have described the connections between flow (Csikszentmihalyi, 1993), meaning-making in occupational participation, and embedded aspects of mindfulness, leading at least one occupational scientist to state that “mindfulness, flow, consciousness and presence” are “interwoven entities” that might not be able to be separated or even need to be (Elliot, 2011, p. 374). Moreover, Martin (2005) proposed that mindful engagement in occupation can enrich one’s quality of life.

Mindfulness, then, would be logically embedded in daily occupations as an intervention approach. In practice, however, mindfulness interventions appear to be frequently employed formally as stand-alone meditation practices, such as mindfulness-based stress reduction training (MBSR), or informally as part of a limited set of activities, such as deep breathing exercises, meditative walking, and yoga (Hardison & Roll, 2016). We were interested in knowing if occupational therapists were leveraging the natural connections between mindfulness and occupational engagement across practice settings in the context of daily client-identified occupations. We specifically wished to learn the extent to which occupational therapists were intentionally applying mindfulness in daily occupations as an intervention approach. To address this question, this paper briefly presents an overview of why mindfulness interventions are on the rise, succinctly summarizes why occupational therapy is well-positioned to hold a more prominent role in mindfulness intervention through occupation, presents findings from a systematic review investigating occupational therapy’s current level of understanding and involvement in mindfulness, and discusses opportunities we identified.

Mindfulness has become a prevalent term used in the media and mental health professions for clear reasons, most of which point to the noticeable rise in cases of anxiety, depression, and other mental health disorders in the US over the last several years. For example, in 2017 the prevalence of major depression in adults aged 18 years and older in the US was estimated at 17.3 million (approximately 7.1% of the population) with a higher prevalence among women (8.7%) than men (5.3%). The highest age group impacted by depression appeared to be individuals aged 18 to 25 years (13.1%) (The National Institute of Mental Health [NIMH], 2019). Estimates for anxiety disorders are reported to be 19.1% of the population, again with women having higher rates (23.4%) in comparison to men (14.3%). Moreover, the National Mental Health Institute (NIMH) estimates that 31.1% of adults will experience major anxiety at least once in their lifetimes (NIMH, 2017b). Rates of posttraumatic stress disorder (PTSD) have also risen with an estimated 3.6% of the population reporting PTSD in 2017 and lifetime estimates of approximately 6.8% of adults aged 18 years in the US reporting at least one episode related to PTSD (NIMH, 2017a). Each of these mental health conditions have strong and well-documented connections to perceived stress (Chaudhury et al., 2015; Vago & Silbersweig, 2012), and a primary intention of mindfulness interventions is managing stress and mental health conditions (Grossman et al., 2004; Kabat-Zinn, 2003; Martin, 2005).

Mindfulness has been described as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 144). Others have expanded this definition to include participation with or without any set goal in mind (Elliot, 2011; Gura, 2010; Strauss et al., 2014; Thompson, 2009). Mindfulness has at least four different definitions in the literature that identify it as a dispositional tendency, a mental state, a form of meditation practice, and as a therapeutic intervention (Vago & Silbersweig, 2012). This paper focuses on the latter two definitions, which have also been articulated as either formal or informal forms of mindfulness (Elliot, 2011; Kabat-Zinn, 2003).

In formal mindfulness individuals participate in an intentional, meditative practice, while informal mindfulness takes place in the context of some focused stand-alone activity, such as yoga, eating, walking, or breathing, in which mindfulness is a primary intention. In both forms attention to the present, such as concentrating on breathing and eliminating distracting thoughts, allows individuals to increase awareness of internal and external stimuli while acknowledging and dismissing uncomfortable feelings (Martin, 2005). Mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT) are perhaps the most widely available and evaluated formal mindfulness-based interventions reviewed in the literature and were designed to treat anxiety and/or depression (Strauss et al., 2014). MBSR incorporates systematic mindfulness meditation training based on principles of behavioral medicine and Buddhist meditation traditions, often with group discussion. MBCT focuses on intentionally redirecting one’s thoughts from unpleasant experiences (Strauss et al., 2014). Formal mindfulness meditation is often incorporated into health programs, including occupational therapy practice, and has been shown to reduce perceived stress and enhance self-agency (Tang et al., 2015; Thompson, 2009). However, formal mindfulness meditation involving focusing on one’s experiences, breathing, and mental imagery without actively participating in a task and as an added-on activity requires additional time set aside in one’s day, therefore making practical application and daily follow-through a concern (Shapiro et al., 2005).

### **History of Mindfulness in Occupational Therapy**

Most forms of informal mindfulness, generally described as an additional activity in which one applies a mindful attention, such as in yoga, have yielded measurable benefits in stress reduction, mental health, and other health conditions, including reduced pain perception (Carsley & Heath, 2018; Hardison & Roll, 2016; Strauss et al., 2014). Informal mindfulness is defined by the application of mindful awareness while experiencing participation in everyday activities without perseveration on competing thoughts, feelings, and body sensations (Kabat-Zinn, 2003).

The early development of occupational therapy practice focused on understanding the innate drive of individuals to engage in daily life activities (Wilcock, 1993). The foundation for occupational participation being intimately connected to the mind and mental well-being was described when Mary Reilly stated that occupational therapy was founded on a simple but profound idea, that “man, through the use of his hands as they are energized by mind and will, can influence the state of his own health” (Reilly, 1962, p. 2). From its inception a major tenet of occupational therapy has been an approach that assists clients in engaging in their meaningful occupations in order to facilitate an increased sense of satisfaction with quality of life as well as performance. Occupational therapists recognize that to achieve success in therapy the client needs to be meaningfully connected to and engaged in the act of whatever they seek to do. While therapists appreciate that one’s occupations vary in terms of importance and

meaning, from the mundane to the more critical, we have also long recognized that a particularly intense engagement carries an impact on well-being (Wilcock, 1993).

### **Mindfulness and Flow**

The importance of an intense subjective engagement while participating in an activity or occupation was described by Wright et al. (2007) as having aspects of both flow and mindfulness. Reid (2011) also noted that while both flow and mindfulness appear entwined in the process of occupational engagement distinctions exist. Mindfulness may be characterized as that state of having one's attention less focused on goal direction, time vaguely unattended or slowed, and a described sense of peacefulness (Kabat-Zinn, 2003; Wright et al., 2007), whereas flow is described as a state in which one experiences full attention, "vital engagement," and satisfaction while participating in something meaningful in which there is typically a focused goal and, similar to mindfulness, a period in which times passes without particular attention (Csikszentmihalyi, 1997; Nakamura & Csikszentmihalyi, 2003, p. 87). It is notable that although there appears to be consensus that the two states are distinct, there is also discussion in the literature inferring that the two states may not be entirely mutually exclusive, meaning that persons may be predominantly in one or the other or shift in and out of either predominant state during occupational engagement (Csikszentmihalyi, 1997; Elliot, 2011; Reid, 2009, 2011; Wright et al., 2007).

The summary message, however, is that the meaningful engagement element in authentic occupational therapy practice parallels language used in both the flow and mindfulness literature and positions our field to leverage the potential power of being mindfully participating in valued occupations. However, in our experience, much of what is described in the occupational therapy literature applies mindfulness either formally through meditation or informally through specific activities as an add-on intervention or focuses on therapists themselves. We were curious regarding the extent to which occupational therapists were viewing the possibility of applying mindfulness, an embedded-in intention of routine occupations, as articulated conceptually in the occupational science literature by Elliot (2011) and in practice by Evetts and Peloquin (2017).

### **The Systematic Review**

The purpose of this systematic literature review was to investigate the extent to which occupational therapists were making explicit connections between mindfulness and occupation-based interventions in occupational therapy practice. The question guiding the review was simple: How has mindfulness been applied specifically during daily occupations as opposed to a stand-alone intervention or trained meditation practice to improve outcomes? The systematic review was conducted according to PRISMA guidelines (Moher et al., 2009). Search parameters included peer review publications in any related disciplines (e.g., psychology, nursing, etc.); written in English; and available online, through library holdings, or through interlibrary loan. Any age group and clinical setting was eligible for inclusion, as were all levels of evidence. Multiple databases searched included the Cumulative Index to Nursing & Allied Health (CINAHL), MEDLINE, PubMed, PsycINFO, and PsychARTICLES. Key search terms included occupation(s), daily activities, occupational therapy, mindful occupation interventions, occupational mindfulness, occupation *with* mindfulness (mindful), stress, stress management, flow, participation, and quality of life. Eligibility criteria for research studies included outcomes of improved mental health, such as decreased feelings of anxiety, depression, and stress, and improvements in self-efficacy, participation, and quality of life.

Abstracts of potential articles were examined for relevance to the review question, initially resulting in seven unique publications. References from preliminary articles and additional searching

during the writing process expanded to seven additional articles that, although they did not exactly fit the initial search criteria, approximated the research question closely enough to be included and added helpful contextual information. Finally, four texts were identified that afforded further background information and/or elaboration on the topic. All authors reviewed the identified publications and participated in synthesizing the information. See Table 1 for a summary of the review and sources identified.

**Table 1**  
*Literature Review Process*

<b>Research Question: How has mindfulness been applied specifically in daily occupations, as opposed to a stand-alone intervention or trained practice, to improve outcomes?</b>	<b>7 articles initially identified</b>	<b>Level of evidence</b>	<b>In the OT/OS literature</b>	<b>Specifies occupation-based</b>
	Carsley, D., & Heath, N. L. (2018)	1	No (coloring activity)	Yes
	Elliot, M. L. (2011)	N/A	Yes (OS)	Yes, conceptually
	Gilmartin, H. M. (2016)	N/A	No (handwashing, etc.)	Yes
	Hanley, A. W., Warner, A. R., Dehili, V. M., Canto, A. I., & Garland, E. L. (2015)	1	No (washing dishes)	Yes
	McCammon, S. (2015)	N/A	Yes (daily routine occupations)	Yes
	Reid, D. (2009)	N/A	Yes (self-reflective OT practice)	Yes, conceptually
	Reynolds, F., & Prior, S. (2006)	5	Yes (art making)	Yes
<b>Articles identified from references review and additional search for closely related articles.</b>	<b>7 articles added</b>			
	Csikszentmihalyi, M. (1993)	N/A	Yes (OS)	Yes, conceptually
	Gura, S. T. (2010)	N/A	Yes (student learning)	N/A
	Hardison, M. E., & Roll, S. C. (2016)	1	Yes (MBI mixed formal and informal)	Mixed
	Reid, D. (2011)	N/A	Yes	Yes, conceptually
	Rizvi, S. L., Welch, S. S., & Dimidjian, S. (2009)	N/A	No	No
	Thompson, B. (2009)	5	Yes (MBI formal only)	No (MBSR)
	Wright, J. J., Wright, S., Sadlo, G., & Stew, G. (2007)	5	Yes	Yes
<b>Books supporting research question</b>	<b>4 books identified</b>			
	Evetts, C. L., & Peloquin, S. M. (2017)	N/A	Yes (crafts)	Yes
	Finlay, L. (2004)	N/A	Yes	No
	Gibbs, V. D. (2017)	N/A	Yes (school-based occupations)	Yes
	Csikszentmihalyi, M. (1997)	N/A	No	Mixed

## Summary of the Review Findings

Seven articles were initially identified that closely matched the review question and search criteria. Two were published in the psychology literature and described Level 1 studies in which the benefit of stress reduction through embedding mindfulness into either a coloring activity with adolescents (Carsley & Heath, 2018) or washing dishes with undergraduate students (Hanley et al., 2015) was found to be of benefit in measured outcomes. The authors in both studies suggested that applying informal mindfulness in the context of a meaningful activity was worth pursuing for preventive stress management. Gilmartin (2016) highlighted the potential benefits of a conceptual stress-management technique for nurses that applied intentional mindfulness when engaging in everyday activities, such as washing hands. In the occupational therapy literature, Reynolds and Prior (2006) studied women who were currently living with cancer and engaged in various arts, such as pottery, painting, and collaging, to invoke flow and coping skills. Although the authors did not describe the facilitation of mindfulness specifically, their study came close to embedding mindful intentions (through descriptions of flow) in occupational engagement. Their results suggested that the intervention was beneficial in reducing the participants' cancer-related stress and worry.

In a different twist, Reid (2009) suggested that active listening, being present in the moment, practice of a nonjudgmental view, and use of self-reflection regularly are facets of mindfulness that occupational therapists can use before, during, and after treatment sessions to promote cultural sensitivity and to establish positive client rapport in a therapeutic relationship. Of note, Reid (2009, 2011) defined an "occupational presence" as a psychological state of being aware that one was engaged fully in the doing of something and described how mindfulness can be used by occupational therapists themselves to see their clients and practice through refreshed points of view. Conceptually, Reid observed "Mindful practice should not be reserved for a perfect time and place but should be practiced during the real, everyday life of occupational therapy practitioners" (Reid, 2009, p. 184).

In an occupational science-focused publication, Elliot (2011) eloquently made the case that although mindfulness was closely connected to positive experiences in activity and occupational engagement, the inclusion of mindfulness as part of an occupational experience was minimally present in the occupational science and therapy literature. Similar to Reid (2009, 2011), Elliot (2011) noted that both a challenge and an opportunity existed in better understanding the role mindfulness played in ordinary daily occupations. She specifically expressed an interest in further understanding how occupations were altered when completed mindfully but stopped short of applying this concept to occupational therapy practice (Elliot, 2011).

McCammon (2015), in an American Occupational Therapy Association special interest issue in mental health, captured the idea of intervening through embedded mindfulness in daily occupations specifically by describing a case-study application of a mindfulness-based cognitive behavioral approach called Acceptance and Commitment Therapy (ACT) by embedding mindfulness approaches into client-selected daily occupations. In this instance, the occupations were leisure-based but McCammon (2015) related the importance of client-valued choice in selecting the occupations in which mindfulness could be included.

Secondary review articles revealed helpful information from seven additional articles and four texts. First, in a scoping review of mindfulness techniques applied in physical rehabilitation via breath, yoga, meditation, and other non-specified activities (Hardison & Roll, 2016), the authors found support for the use of these stand-alone mindfulness trainings to enhance client self-efficacy and disease

management, improve adaptation to disability and quality of life perception, and reduce pain and depression associated with neurocognitive and neuromotor disorders. Of the 14 articles reviewed, however, only two instances were identified in which occupational therapy facilitated the intervention. Gura (2010) described that the conceptual underpinnings of incorporating mindfulness into the occupation of learning, and specifically in the college curriculum of health care professionals, (counseling, occupational therapy, nursing, etc.) may have benefit on graduating clinicians who have increased empathy, higher stress tolerance, and an elevated awareness of the therapeutic relationship (Gura, 2010). Thompson (2009) studied formal mindfulness interventions in occupational therapy practice, noting that mindfulness was complementary. Findings supported that the interventions were helpful in promoting the health and well-being of people living with chronic conditions and that further study was needed to explore the common connections.

Of the four texts included, two provided specific information connecting occupational therapy practice and mindfulness. Evetts and Peloquin (2017) made clear the opportunities for therapists by promoting mindful participation in crafts and leisure. Relating back to the profession's roots and Reilly (1962), the authors made the point in their title that participation in crafts engages "more than hands" and provided an introduction that grounds the profession's history and tenets in meaningful engagement in valued occupation. Gibb's manual for school-based therapists connects school occupations to the benefits of mindfulness through practical intervention suggestions (Gibbs, 2017). The other two texts provided valuable conceptual foundation for the topic, and Csikszentmihalyi (1997) underscored the connections among flow, occupational engagement, and mindfulness. The other study did not address the use of daily occupations specifically as an intervention vehicle for mindfulness intentions but was invaluable in reinforcing the role of occupational therapy in psychosocial practice (Finley, 2004).

## Conclusion

The conceptual connections among occupational engagement and both physical and mental health have been well articulated in the past and arguably from the beginning of the profession, albeit without the terminology used today. As noted, Reilly (1962) articulated the connections in her Slagle lecture nearly 60 years ago. More recently, others, including Csikszentmihalyi (1993, 1997), Reid (2009, 2011), Elliot (2011), and Wright et al. (2007, 2014), have made clear conceptual connections among occupational engagement and mental states of well-being, including descriptions of both flow and mindfulness as important attributes of meaningful doing. Several therapists have applied formal mindfulness techniques into practice, while others have included mindfulness concepts into leisure occupations. However, concerns emerged from this review that suggest we have under claimed the value of mindful participation in daily, routine activities and occupations that are a key part of our history and practice domain.

First, despite several papers and texts that conceptually document the relationships, we could identify only a handful of publications that explicitly made the connection between occupational engagement and mindfulness in current practice. Of the eight that met our search criteria, only three described real-life applications to practice, and they did so only in the context of crafts and leisure. Articles that connected mindfulness to everyday occupations beyond leisure were found only in one psychology and one nursing publication, and occupational therapy was not mentioned. In the psychology publication the authors noted that "mindfulness of everyday life activities may enhance situational awareness of sensory details, enhance affective experience during task performance, and possibly even influence the perception of how much time has passed during the activity" (Hanley et al.,



2015, p. 1096). The authors further noted that the usefulness of applying mindfulness in daily living tasks has been understudied and warrants further attention.

In nursing, the authors argued that embedding mindfulness into daily routines such as hand washing may be more beneficial to mental health over asking people to add-on an additional task in their already busy work and home lives. This is also something noted by Shapiro et al. (2005) when describing that while mindfulness interventions have shown benefit, follow-through of techniques may be harder to maintain because they are difficult to fit into daily routines because of the time required to focus only on internal thoughts without actively completing tasks simultaneously. This latter position underscores the often difficult task of adding something extra to people's daily routines but is missing the possible application of informal forms of mindfulness over formal meditation forms.

Occupational therapists are well-positioned to offer interventions and techniques for wellness and recovery by helping people embed mindfulness into normal routines and daily occupations such that they become a part of daily life. This approach is much more likely to be embraced over therapeutic suggestions of adding in an additional activity or a new occupation that may or may not be of any interest and which may take up precious time and add potential costs and travel burdens.

We offer the term mindful participation as one way to conceive of blending informal mindfulness into everyday occupations. Our definition embraces what others have described (Csikszentmihalyi, 1993, 1997; Elliot, 2011; Reid, 2009, 2011; Reilly, 1962; Wright, 2007, 2014) as the act of taking part in valued occupations in a manner that promotes attention to the act and stimuli surrounding the doing of an occupation and which provides an embraced sense of satisfying engagement and is possibly accompanied (or not) by a sense of flow and goal-directedness. Mindful participation involves no additional lengthy mindful-based training programs or the addition of traditional occupations viewed as mindful; rather, it leverages client-centered choice to identify one or several routine and daily occupations in which they may practice being mindful by applying techniques of breath and focus from formal mindfulness. When appropriate, we envision it as a sort of overlay to the frame of reference of choice being applied with clients or in practice settings. Our mindful intention is that occupational therapists and researchers will recognize the opportunities inherent in such an approach and embrace mindful participation, or the term that suits best in the variety of settings in which they may practice. In so doing, occupational therapists have an important role in promoting mindfulness interventions.

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