

UNDERSTANDING & USING MINDFULNESS AS AN EVIDENCE-BASED
OCCUPATIONAL THERAPY INTERVENTION:
AN EDUCATIONAL AND INSTRUCTIONAL MANUAL FOR OCCUPATIONAL
THERAPY STUDENTS, EDUCATORS, & CLINICIANS

A thesis submitted to the faculty at Stanbridge University in partial fulfillment of the
requirements for the degree of Master of Science in Occupational Therapy

by

Madelyn Beltrami, Heidi Cuett, Karin Grathwohl, and Tiffany Montes

Thesis advisor: Cris Scionti OT/L, RYT 500

May 2020

© 2020
Madelyn Beltrami, Heidi Cuett, Karin Grathwohl, Tiffany Montes
ALL RIGHTS RESERVED

Certification of Approval

I certify that I have read *Understanding & Using Mindfulness as an Evidence-based Occupational Therapy Intervention: An Educational and Instructional Manual for Occupational Therapy Students, Educators, & Clinicians* by Madelyn Beltrami, Heidi Cuett, Karin Grathwohl, and Tiffany Montes, and in my opinion, this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy at Stanbridge University.



Cris Scionti OT/L, RYT-500

Instructor of Occupational Therapy

ACCEPTED



Vikas Sharma, OTD, OTR/L

Program Director, Master of Science in Occupational Therapy

Abstract

Mindfulness is the awareness that arrives from purposefully paying non-judgmental attention to the present moment (Kabat-Zinn, 2013). Mindfulness-based interventions are becoming more widely used in occupational therapy (OT) practices for a variety of conditions and in different practice settings. Occupational therapists (OTs) can use mindfulness to increase occupational performance and engagement in clients. A literature review was conducted to support the efficacy of mindfulness in the context of occupational therapy practice settings. This manual was created to provide occupational therapy professionals, educators, and students with mindfulness-based OT assessments and evidence-based interventions that can be used with clients in various settings and with various clinical conditions. The manual was read by expert reviewers and edits were made according to the feedback. The final manual serves as a tool to support clinicians, students, and educators to promote mindfulness in the field of occupational therapy.

Table of Contents

Introduction.....	1
Occupational Therapy and Therapeutic Use of Self.....	2
Statement of the Problem.....	3
Literature Review.....	4
OT Practice and Complementary Health Approaches	4
Mindfulness Intervention and the OTPF.....	5
Physiological Effects of Mindfulness on the Brain	7
Stress.....	7
Koru meditation.	7
Caregiver stress.....	9
Chronic Pain (Musculoskeletal).....	9
Kabat-Zinn and chronic pain.	9
MBSR and chronic pain.....	11
Neurological Conditions	12
Multiple Sclerosis.	12
Stroke.	13
Neurodegenerative conditions	14
Alzheimer’s disease.	14
Parkinson’s disease.	14
Post-Injury Depression and Anxiety.....	15
Theoretical Framework.....	17
Canadian Model of Occupational Performance-Engagement (CMOP-E).....	17

Canadian Occupational Performance Measure (COPM)	17
Methodology	18
Limitations	19
Ethical and Legal Considerations	21
Conclusion	21
References	23
Appendix A: Manual	28
Appendix B: Institutional Review Board (IRB)	29
B1. Institutional Review Board Approval	29
B2. Modification Form for Institutional Review Board	30
B3. Modified Institutional Review Board Approval	32
Appendix C: Authorized Permission to Use Content	33
C1. Authorized Permission to Use Content from Mindfulness For the Next Generation .	33
C2. Authorized Permission for CMOP-E Diagram	34
C3. Authorized Permission for COPM	35
C4. Authorized Permission for Full Catastrophe Living	36
Appendix D: Feedback Forms	37
D1. Blind Reviewer Feedback Form	37
D2. Peer Group Feedback Form	39

Understanding & Using Mindfulness as an Evidence-based Occupational Therapy
Intervention: An Educational and Instructional Manual for Occupational Therapy
Students, Educators, & Clinicians

Occupational therapy (OT) is an inherently holistic practice with roots in mental health. One of the main roles of occupational therapists (OTs) is to help clients develop alternative strategies in order to perform valued tasks (Richardson & McLaughlin, 2018). There are certain conditions where traditional approaches through medical practices fail to be effective. Ancient Eastern traditions such as different mindfulness techniques are now being used not only in Western medicine, but also companies such as Google are offering their 52,000 employees free lessons in mindfulness (Richardson & McLaughlin, 2018). Therapeutic use of self (Richardson & McLaughlin, 2018) is an essential tool in the profession of OT, and plays an instrumental role in implementing mindfulness-based interventions (MBIs). In OT practice, therapeutic use of self is a critical skill which must be developed by both practitioner and client to enhance occupational engagement and client outcomes. The development of the therapeutic use of self can be considered the single most important line of intervention one can provide as an occupational therapist (Richardson & McLaughlin, 2017). Therapeutic use of self creates a deeper sense of empathy and understanding between client and practitioner, in hopes to increase compliance and trust.

Jon Kabat-Zinn, who is considered the pioneer of mindfulness in Western medicine, defines mindfulness as “the awareness that arises from paying attention, on purpose, in the present moment and non-judgmentally” (Kabat-Zinn, 2013, p. 146). MBIs are increasingly being used in OT practice to address a variety of conditions. To

understand why MBIs are gaining popularity, it is important to first define what a mindfulness-based practice is. Crane et al. (2016) defined the essential elements of mindfulness practice with Kabat-Zinn to create a foundation for those wanting to incorporate mindfulness into practice. Firstly, mindfulness-based practices are rooted in traditional theories and practices yet also incorporate research from the fields of psychology, medicine, education, and more, in order to provide evidence that the practices work (Crane et al., 2016). After creating a theoretical foundation, MBIs must address distress and the pathways to relieving distress through the model of human experiences (Crane et al., 2016). Mindfulness and MBIs are focused on the present moment, decentering, and taking an approach-based rather than avoidance-based orientation to one's experiences (Crane et al., 2016). MBIs must support the development of self-regulation in attention, emotion, and behavior as well as positive qualities such as compassion, wisdom, and equanimity in the self (Crane et al. 2016). Finally, one must be an active participant in MBIs in order to authentically deliver MBIs in OT practice (Crane et al., 2016). Clinicians must also seek to develop insight and understanding of the self through mindfulness practice in order to use MBIs with clients (Crane et al., 2016).

Occupational Therapy and Therapeutic Use of Self

According to Richardson and McLaughlin (2018), The American Occupational Therapy Association (AOTA) added the therapeutic use of self to the Occupational Therapy Practice Framework version 3 (OTPF-3) which intends to encourage OTs to develop and manage therapeutic relationships with clients using skillful narrative and clinical reasoning. As mentioned, the therapeutic use of self is an essential tool which the occupational therapist must embody in order to provide optimal treatment while being

empathetic and client centered (Richardson & McLaughlin, 2018). Therapeutic use of self is described as the ability to utilize oneself in such a manner that it becomes an effective tool in the evaluation and intervention process (Richardson & McLaughlin, 2018). Although mindfulness is not something tangible, it can benefit the practitioner by preparing them to work and value the present moment which in turn has a beneficial effect on the client as well (Richardson & McLaughlin, 2018).

Statement of the Problem

As a result of escalating health care costs, patients and health care professionals alike are seeking complementary approaches to rehabilitation (Zou et al., 2018). Due to concerns about rising health care costs, decreased access to care, and inefficient utilization of care in the United States has resulted in an ever-changing health care system (Pritchard, Fisher, Rudnitsky, & Ramirez, 2019). Due to the disparity between health needs not being met and the affordability of health care, Americans are turning to alternative treatments for many symptoms and diagnoses. A 2012 survey by the National Center for Complementary and Integrative Health found that 33% of American adults and 12% of American children used some complementary health approach that year (Nahin, Barnes, & Stussman, 2016). Though mindfulness is used with increasing frequency in health care as costs rapidly increase and people are searching for low-cost, effective treatments for a variety of diagnoses, there is no evidence-based resource for practitioners to utilize in practice. Mindfulness and mind-body movements (MBM) have several advantages as primary and supplementary interventions, which is why the number of practitioners using mindfulness is increasing rapidly. Not everyone has the knowledge or background training in mindfulness to effectively implement mindfulness as an

intervention. Without proper training and a resource of assessments and interventions for use in practice, utilizing mindfulness-based practices with clients may become a guessing game with each diagnosis and symptom encountered. Hardison and Roll (2016) address that there is a lack of literature on the use of mindfulness in practice-based settings. The OT profession lacks an educational resource for OT students, clinicians, and educators to utilize that fills this gap.

Purpose

The purpose of the 1B manual is to provide occupational therapy professionals, educators, and students with Mindfulness Based Occupational Therapy assessments and evidence-based interventions that can be used to improve quality of life and engagement in meaningful occupations with patients of various clinical conditions. The manual will include mindfulness-based assessments and evidence-based interventions to help manage the symptoms associated with stress, chronic pain, neurological conditions, neurodegenerative conditions, and post-injury depression. The 1B manual will serve as an evidence-based resource that can be used in various OT practice areas. It is an extension of the 1A manual and will provide the consumer with a comprehensive guide of mindfulness-based practices.

Literature Review

OT Practice and Complementary Health Approaches

AOTA's 2017 Position Paper supports the use of complementary health approaches and integrative health (CHAIH) in OT. CHAIH combines complementary health approaches which may include natural products and/or mind and body practices. Integrative health refers to the incorporation of complementary health approaches into

conventional health care. CHAIH is used by patients to prevent symptoms or manage clinical conditions and can enhance the quality of life and overall well-being (AOTA, 2017). OTRs are required to obtain credentials, training, or licensure for all CHAIH included in an OT plan of care (AOTA, 2017).

CHAIH can be used as preparatory methods and tasks, as occupations, and with activities in the field of OT. Deep breathing, guided imagery, and yoga may reduce stress in clients before performing activities of daily living (ADLs). Mindfulness or meditation reduce pain, and Tai Chi or standing yoga poses for balance may be used with activities or during occupations (AOTA, 2017). Incorporating CHAIH into OT interventions must be done in the context of the overall OT process and plan of care (AOTA, 2017). OTs must ensure that the CHAIH aligns with the client's cultural practices, priorities, and needs (AOTA, 2017). OTs should also collaborate with other team members, including professions that provide CHAIH interventions that are outside of the OT scope of practice (AOTA, 2017). Licensed CHAIH professions include acupuncture and Asian medicine, chiropractic, massage therapy, home birth wifery, and naturopathic medicine. OT practitioners can utilize CHAIH practices to enrich clients' participation in meaningful activities and roles (AOTA, 2017).

Mindfulness Intervention and the OTPF

Although ancient mindfulness philosophy originated a long time ago, the holistic philosophy of OT fits well with these ancient mind-body techniques. Mindfulness interventions are often associated with addressing pain, stress, and anxiety, but OTs work with clients with a much wider variety of symptoms and diagnoses. Mindfulness practices encourage a holistic view of the self, as does OT (Hardison & Roll, 2016).

Hardison and Roll (2016) conducted a scoping review to describe how mindfulness interventions are used in physical rehabilitation as well as identified the implications for use in OT practice.

Mindfulness can be used as both a means to enhancing occupational performance and as an occupation itself (Hardison & Roll, 2016). Structured mindfulness techniques, such as Mindfulness Based Stress Reduction (MBSR) and Acceptance Commitment Therapy (ACT), as well as general mindfulness practices are traditionally associated with addressing mental health and general wellness, but can be used in physical rehabilitation as well (Hardison & Roll, 2016). MBSR as an intervention becomes an occupation for patients to address and decrease their own physical pain. MBSR can be linked to the OTPF under the categories of *occupation and activities*, *education and training*, and *group interventions* for use in OT practice (Hardison & Roll, 2016). ACT is traditionally viewed as a more psychological approach but is still considered a mindfulness intervention as it addresses the view of the self through mindfulness principles (Hardison & Roll, 2016). Through their scoping review of mindfulness practices in physical rehabilitation, Hardison and Roll (2016) found that ACT was used as *activities*, *education*, or as *preparatory methods and tasks* by therapists. General mindfulness practices focus on the holistic, non-judgmental view of the self and were used to open, close, or alongside traditional rehabilitation treatments (Hardison & Roll, 2016). The goal of using general mindfulness practices in OT are to facilitate occupational engagement, increase participation in therapy, reduce anxiety, and increase body awareness for clients (Hardison & Roll, 2016). Similar to the MBSR and ACT, general mindfulness practices

with clients can be used as *activities, education, or preparatory methods and tasks* (Hardison & Roll, 2016).

Physiological Effects of Mindfulness on the Brain

Magnetic resonance imaging (MRI) scans have granted us insight into how the brain changes when people practice mindfulness regularly. The hippocampus is associated with emotion and memory and is susceptible to shrinking when under chronic stress being that it is covered in receptors for the stress hormone, cortisol (Congleton, Holzel, & Lazar, 2015). Studies have shown that the grey matter in the hippocampus increased in individuals who engage in mindfulness (Congleton et al., 2015). This increase in grey matter is associated with improved resilience, memory, and learning (Congleton et al., 2015). The amygdala is another area of the brain which plays a role in stress, is responsible for the perception of emotions, and helps store memories of events to prepare us for similar events in the future. The grey matter in the amygdala was seen to shrink after consistent engagement in mindfulness techniques, which is associated with a decrease in the stress response (Joshi, 2017). Deep breathing, yoga, and meditation stimulate the vagus nerve, increasing the parasympathetic activity, and thus keep the body in a calm state (Breit, Kupferberg, Rogler, & Hasler, 2018).

Stress

Koru meditation. Koru meditation is an evidence-based mindfulness program for college students and other emerging adults. The new generation of emerging adults want more meaning from their experiences but are continually faced with a multitude of stressors. The National College Health Assessment (2018) found that 35.3% of college students reported stress as impacting their academic performance. Most people,

especially emerging adults, need methods to quickly cope with sudden challenges such as stress and anxiety. College students are faced with large pressures from society and from their own internal expectations and need tools to help them cope. If emerging adults are unable to handle the stressors of daily life, their ability to perform meaningful occupations will be negatively affected.

The vision for Koru is for students to bring compassion into their lives and work, to be open to what is occurring in the present moment, to have a sense of gratitude, and to believe in their ability to cope with life's challenges. Rogers and Maytan (2012) collected course evaluations from students participating in the Koru meditation program to show how their perspectives changed. The quality of the class was measured through written evaluations based on five general questions. Feedback was positive for four out of the five questions. After the Koru program, students felt more capable of managing challenges that they previously struggled with and noticed more clearly how they respond in challenging situations (Rogers & Maytan, 2012).

Greeson, Juberg, Maytan, James, and Rogers (2014) also studied the effectiveness of Koru on undergraduate, graduate, and professional students in a university setting. In this study, 90 students participated in a 4-week Koru program and completed standardized questionnaires that assessed symptoms of stress, sleep problems, mindfulness of thoughts and feelings, self-compassion, and gratitude (Greeson et al., 2014). The Koru program consisted of 12 to 14 students with one or two teachers, four weekly 75-minute group sessions, 10 minutes of daily meditation outside of class, a daily meditation log, and reading required chapters in Kabat-Zinn's *Wherever You Go, There You Are* book (Greeson et al., 2014). The results of the randomized control trial study

were that Koru reduced symptoms of stress, enhanced psychological well-being, and promoted sleep in the students who participated (Greeson et al., 2014). The Koru group had significant improvement in perceived stress, sleep problems, mindfulness, and self-compassion, compared to the waitlist control group (Greeson et al., 2014).

Caregiver stress. Caregiving can impact the caregiver's life in various ways, including changes to their daily routines, ability to work, engagement in social interactions, and mental and physical health status (Centers for Disease Control and Prevention [CDC], 2019). While caregiving can be significantly rewarding, caregivers often neglect their own health needs (CDC, 2019). Whitebird et. al (2012) conducted a study of 78 caregivers of patients with dementia and Alzheimer's related neurodegenerative diseases. Participants engaged in an 8-week MBSR intervention course with instruction in concepts of mindfulness, meditation and gentle yoga exercises each week. They were provided audio and written materials to help engage in home practice of mindfulness-based interventions. Findings from the study suggest that mindfulness-based interventions, and MBSR specifically, have a potential to improve the negative implications of caregiver mental stress and negative health implications. MBSR in this study was noted as more effective at improving overall mental health, reducing stress, and decreasing depression than other community caregiver training and support. This research is encouraging, as it was successful in assisting caregivers better manage the negative symptoms of stress, therefore improving their quality of life.

Chronic Pain (Musculoskeletal)

Kabat-Zinn and chronic pain. When living with chronic pain, it is not uncommon for the individuals suffering to be told that they are just going to have to

endure the pain (Kabat-Zinn, 1982). According to The Centers for Disease Control and Prevention (Dahlhamer et. al, 2019), there are approximately 50 million individuals in the United States living with chronic pain. Pain is typically a normal protective mechanism indicating that the adaptive neurological pathway is functioning efficiently producing an appropriate motor response; however, when it is in its chronic pathological form, it is of no advantage to the individual (Kabat-Zinn, 1982). Kabat-Zinn is not only considered the pioneer in introducing mindfulness to Western culture, but also is responsible for creating the MBSR program which serves as an aid to help patients teach themselves how to cope with chronic pain. In a study conducted in 1982 by Kabat-Zinn, 51 chronic pain patients completed a 10-week MBSR program. The subjects engaged in two hours of MBSR techniques once a week. The three mindfulness meditation methods that were taught were sweeping, mindfulness of breath and other perceptions, and hatha yoga. During the first four weeks, sweeping (progressive muscle relaxation) was practiced for homework using a 45-minute guided sweeping meditation on six days out of the week. The hospital sessions consisted of mindfulness of breath and sensation, and were urged to supplement the tape by using it for at least five minutes each day. Following the first four weeks of MBSR, a 45-minute hatha yoga was introduced allowing the patients to alternate between the sweeping and yoga for homework. During weeks seven and eight, the patients were instructed to practice yoga for 30 to 45 minutes per day without using the tape for guidance. The final weeks consisted of practicing any of the aforementioned mindfulness methods with the option of whether or not to use the tape. Using the Body Parts Problem Assessment (BPPA) pain measure, it was found that there was a significant decrease in

pain after engagement in mindfulness-based methods (Kabat-Zinn, 1982). Improvement in pain-related symptoms were maintained during the 2.5, 4, and 7-month follow-ups.

In another study conducted by Kabat-Zinn, Lipworth, & Burney in 1985, 90 individuals with chronic pain were split up into two groups to compare the effects of MBSR to traditional medical pain approaches with no training of self-regulation. This descriptive comparison study included people with chronic pain ranging from chronic pain syndrome, peripheral nerve problems, gastrointestinal issues, and migraines (Kabat-Zinn et al., 1985). 21 of the individuals in the comparison group were treated using traditional methods such as physical therapy, Transcutaneous Electrical Nerve Stimulation (TENS) units, nerve blockers, analgesics, and antidepressants (Kabat-Zinn et al., 1985). The group mean value on the pain rating index was reduced by 58% and the BPPA scores were reduced by 29% for the individuals who practiced MBSR techniques, as well as the number of symptoms reported decreased significantly (Kabat-Zinn et al., 1985).

MBSR and chronic pain. Chronic pain is a common symptom in patients with musculoskeletal conditions. MBSR programs have potential to reduce pain in such patients. La Cour and Petersen (2015) conducted a study to investigate the effects of an MBSR program on patients with chronic pain. 109 patients with nonspecific chronic pain were randomized to a standardized MBSR program or to a wait list control group. The mindfulness program was based on the standard MBSR protocol, and participants were taught to meditate for 45 minutes every day and to keep a diary (La Cour & Petersen, 2015). The main outcome measure was the “vitality” dimension of the 36-Item Short Form Survey (SF36), which is a set of generic quality of life measures (La Cour &

Petersen, 2015). There were significant positive effects in the hypothesized direction for the vitality dimension of the SF36 instrument (la Cour & Petersen, 2015). The results showed that mindfulness meditation had significant effects on the lives of patients with long-term chronic pain. This study supports the use of a standardized mindfulness program based on a MBSR protocol to positively contribute to pain management. The mindfulness program can also have clinical effects on patients with long-lasting chronic pain.

Neurological Conditions

Multiple sclerosis. Unlike a single neurological event, neurological conditions are chronic and progressive, which often leads to signs and symptoms of anxiety, stress, and depression (Schultz-Krohn, Foti, & Glogoski, 2018). Multiple sclerosis (MS) is one example of a nervous system disease in which the immune system attacks the protective myelin covering nerve fibers. The damaged nerves disrupt normal nerve impulses and can lead to fatigue, vision loss, pain, and impaired coordination. OTs treat the sequelae of such conditions. Kolahkaj and Zargar (2015) assessed the effects of MBSR on anxiety, stress, and depression in women with multiple sclerosis. The experimental group received 8 weeks of MBSR training following Kabat-Zinn's protocol. Both the experimental and control groups filled out the depression, anxiety, and stress scale (DASS-21) at the start of the study, 8 weeks later, and one month after the end of the intervention (Kolahkaj & Zargar, 2015). The results showed decreased depression, anxiety, and stress scores in the group that received MBSR (Kolahkaj & Zargar, 2015). The findings indicate that MBSR can reduce depression, anxiety, and stress in patients with MS. MBSR can also be used as

a low-cost and accessible treatment for medical staff working with MS patients to reduce depression, anxiety and stress (Kolahkaj & Zargar, 2015).

Stroke. Stroke is the leading preventable cause of disability, affects approximately fifteen million new individuals each year, and leaves five million of those individuals permanently disabled (Zou et al., 2018). One of the most common symptoms associated with stroke survivors is a balance deficit due to affected proprioception, visual loss, and altered gait (Zou et al., 2018). Due to escalating health care costs, patients and health care professionals alike are seeking complementary approaches to rehabilitation (Zou et al., 2018). A meta-analysis by Zou et al. (2018) examined the efficacy of mindfulness and mind-body movements as a complementary rehabilitation method for balance improvement in stroke survivors through a meta-analysis of randomized control trials. Based on the literature for post-stroke rehabilitation, Zou et al. (2018) found that mind-body movements (MBM) may improve balance function among stroke survivors in both the acute and post-acute phases of stroke. Zou et al. (2018) postulate that the reason behind the success of balance improvement through MBM is that MBM enhances psychological proprioception. By combining control of posture, movement, and breathing, people may enter an enhanced state of awareness, strengthening their overall state of regulation (Zou et al., 2018). This enhanced state of awareness is recognized as “flow” in OT literature. The concept of flow through the lens of the Canadian Model of Occupational Performance and Engagement (CMOP-E) is one way to enhance occupational engagement (Reid, 2011).

Neurodegenerative conditions

Alzheimer's disease. The use of MBSR may also impact neurodegenerative disease progression. Neurodegenerative diseases are debilitating conditions that are incurable and are a result of progressive degeneration or death of nerve cells. Certain MBSR techniques such as yoga and meditation were seen to cause a decreased expression of pro-inflammatory genes which can be found in patients with Alzheimer's disease, as well as an overall reduction in loneliness and improvement in quality of life. A small randomized control trial (RCT) study (N=40), conducted by Creswell et al. (2012) at UCLA medical center in Los Angeles, tested the effectiveness of MBSR. The 8-week MBSR program used in the study indicated that the *MBSR* reduced loneliness as well as a reduction of C-Reactive Protein and a downregulation of NF- κ B-associated gene expression post-treatment. This study provides an indication that MBSR may assist patients with neurodegenerative conditions in reducing loneliness and related pro-inflammatory gene expression.

Parkinson's disease. Parkinson's disease (PD) is the second most common chronic neurodegenerative disease for people aged 65 and older globally (Son & Choi, 2018). Due to the degenerative nature of PD, individuals with PD are at increasingly at risk for falls, higher levels of anxiety, decreased levels of physical activity, and decreased quality of life as the disease progresses (Green et al., 2019). Son and Choi (2018) examined the effects of MBM on PD symptoms by conducting a 6-week meditation-based exercise program and examined the effects on motor and nonmotor PD symptoms. The motor symptoms of PD were measured using measurements of items in the senior fitness test while nonmotor symptoms were measured through assessments for anxiety,

depression, and PD specific assessments for quality of life, sleep, and activities of daily living completion. Son and Choi (2018) found that the experimental group had significant improvement in motor and nonmotor symptoms compared to the control group after completing the mindfulness-based exercise program. These findings are consistent with a systematic review conducted by Green et al. (2019) who examined the effects of yoga, a MBM, on balance in adults with neuromuscular impairment including multiple sclerosis, PD, and dementia. Green et al. (2019) found that using yoga with populations with neuromuscular impairment, including PD, can improve balance and decrease the risk of injury due to fall.

Post-Injury Depression and Anxiety

The emotional impact of a sudden injury can be devastating. A longitudinal study of over 100 people with a traumatic injury found that over half of the participants reported above normal levels of anxiety, depression, and stress (Wiseman, Curtis, Lam, & Foster, 2015). The structured mindfulness technique of ACT is a mindfulness approach that focuses on altering one's perception of a catastrophic event in order to change avoidant behaviors (Bennett & Lindsay, 2016). A case study conducted by Bennett and Lindsay (2016) used modified ACT coupled with mindfulness techniques with a female hockey player who, despite being medically cleared to play, was avoiding practice, having difficulty sleeping, and avoiding social interactions with her teammates due to perceived pain and fear of reinjury. The authors used ACT techniques to address negative self-views and used mindfulness to address the perceived lower back pain that prevented her from engaging in play (Bennett & Lindsay, 2016). After six months and twelve sessions of ACT, the player no longer complained of back pain, increased her training

time from 30 minutes to two hours, and improved her sleep hygiene and sleep quality (Bennett & Lindsay, 2016).

A study conducted by Bédard et al. (2003) tested the effectiveness of MBSR on patients who had experienced mild to moderate traumatic brain injuries, as this population have been found to have an increased risk of developing depression. Researchers attributed this increased risk to a sense of helplessness due to their injuries, as well as changes in occupational roles and engagement. Participants in this controlled trial study engaged in the weekly MBSR group interventions for 12 weeks. MBSR curriculum in the Bédard et al. (2003) study included the exploration of guided meditation, breathing exercises, guided visualization, and group discussion. Researchers hoped to measure the effectiveness of MBSR to encourage a new way of thinking about disability and how to approach life to bring a sense of acceptance, improving participant quality of life. Outcome measures included the Short Form Health Survey, used to measure QOL, as well as the use of the Beck Depression Inventory and Perceived Stress Scale. Data collected indicated that the overall change recorded for depression symptoms approached statistical significance. The treatment group mean dropped by almost 50% whereas the control group mean increased, indicating a strong effect size. The study supports the occupational therapist's role in facilitating effective holistic mindfulness-based interventions as an adjunct to conventional medical and rehabilitation interventions.

Theoretical Framework

The Canadian Model of Occupational Performance-Engagement (CMOP-E)

The CMOP was founded by the Canadian Association of Occupational Therapists in 1997. It includes the person, environment, occupation, and was expanded by Polatajko, Townsend, and Craik in 2007 to include engagement, and then became known as CMOP-E. As mentioned, the CMOP-E is used to promote occupational engagement through flow (Reid, 2011). Reid (2011) describes flow as the state of being aware of one's actions but not aware of the awareness and is related to the emotional aspects of subjective well-being. The focus of the CMOP-E is consistent with OT's core principle of client-centered practice. CMOP is the first framework to encompass spirituality in human occupation, declaring that spirituality is expressed through occupations (Polatajko et al., 2007). The human spirit is the essence of one's identity, and the occupations that we perform reflects who we are. The CMOP-E emphasizes the importance of spirituality at the core of the framework, promoting engagement in mindful occupational performance (Polatajko et al., 2007). This model exemplifies the holistic nature of engagement in occupations and helps explain how client factors and contexts influence an individual's engagement. Ultimately, this model allows OTs to take a client-centered approach when developing a treatment plan, therefore increasing the client's motivation and adherence to treatment.

Canadian Occupational Performance Measure (COPM)

The COPM is a semi-structured interview outcome measure that is client-centered and not diagnosis specific, which means it can be used in various contexts. This outcome measure is widely used by OTs and other health care professionals to assess areas of self-care, productivity, and leisure. It is based on the guidelines for client-centered practice of

OT. Through the use of the COPM, the client and occupational therapist determine abilities and disabilities in occupational performance. In a randomized control trial conducted by Schmid, Grimm, and Chop (2018), eight weeks of yoga interventions were compared to traditional care in people with chronic pain. The COPM was used to measure occupational performance in the 83 subjects in both the control and experimental group. They found that the COPM scores were improved by 27% in the group who practiced yoga when compared to the group that received traditional medical care. This outcome measure is unique in the sense that it takes a holistic OT approach.

Methodology

We conducted a literature review with the following key search words: Mindfulness, mindful, MBSR, stress, OT, chronic pain, neurodegenerative, Koru meditation, caregiver stress, neurologic conditions, and post-injury depression. All articles included in the educational manual are from peer-reviewed journals. Evidence-based mindfulness interventions are cited from randomized-controlled trials, meta-analyses, scoping reviews, meta-reviews, pilot studies, and case reports. Textbooks or articles from the primary founders or authors of techniques are also included. All mindfulness interventions and techniques mentioned in the manual are credited back to the literature to increase the validity and reliability of the 1B manual. The manual includes assessments and evidence-based interventions found in research articles on mindfulness for stress (caregivers, students, and post-injury stress), chronic pain, neurological conditions (fatigue, motor control, impaired balance, anxiety), neurodegenerative conditions (impaired balance, cognitive and sensory deficits), and post-injury depression. The authors of the manual took photos of informal mindfulness

techniques during ADLs to illustrate the use of mindfulness in everyday activities. All copyrighted materials are cited properly, or permission was sought for all assessments, questionnaires, and models that have been reproduced in the manual (see Appendix B). Free questionnaires and/or non-standardized mindfulness assessments/questionnaires available on the web have been modified to better serve the purpose of IB manual. The completed manual will be kept in the Learning Resource Center and OT/OTA administration office—pending acceptance and approval—and will serve as an educational tool for Stanbridge University educators and students. The educational manual might be shared at local, state, and/or national conferences.

After a first edit of the manual was completed, the authors sought feedback from anonymous expert reviewers in order to refine the manual. Upon receiving feedback from expert reviewers, the authors continued to make edits to reflect the wishes of the reviewers and increase clarity of use. An attachment of the feedback form used by reviewers can be found in Appendix C. After receiving feedback from the primary reviewer and suggested edits were made, the authors sought out additional feedback. This change to the methods required approval by the Institutional Review Board (IRB) who originally approved this thesis project. The IRB modification and approval forms can be found in Appendix A.

Limitations

The main limitation of creating this manual is the lack of available evidence-based research on MBIs used with clinical conditions in the context of OT. Due to the limited research on CHAIH in occupational therapy practice, the authors used the most

current research on the impact of mindfulness on the common symptoms of certain diagnoses addressed by OTs.

Reid (2011) states that many studies are subjected to varying methodological approaches, making it difficult to determine which aspects of mindfulness intervention had a therapeutic effect. Despite this, Reid (2011) acknowledges that findings from various randomized controlled and uncontrolled studies indicate positive outcomes which emphasize the phenomena of flow and mindfulness influence well-being through occupational engagement. Furthermore, Whitebird et al. (2012) have stated that the daily practice of MBSR can be a challenge for clients to maintain over time. This echoes the fifth tenet that Crane et al. (2016) use to define effective mindfulness-based practices, that the participants must engage in sustained training which may not be feasible for all clients. Therefore, mindfulness should be viewed as a strategy that is continually practiced and measured by clinicians to understand its long-term client outcomes. This manual is not intended to replace clinical expertise, but to act as a support for clinicians, students and educators. OTs using the manual must use clinical judgement to determine the best way to use it.

Potential limitations to this manual include the amount of available evidence-based research. Some of the assessments found in the literature are not standardized as well. Therefore, the manual is lacking standardized assessments. There are also a limited number of OT-based studies on mindfulness practices. Due to the nature of accessing copyrighted materials, there may be a financial barrier for users to access desired assessments. The manual was reviewed by an expert on mindfulness in OT and feedback was incorporated in the construction of the manual.

Ethical and Legal Considerations

This project-based thesis does not involve human subjects. Legal considerations include issues of copyright, plagiarism, citing, and not having permission to use assessments or resources. The manual will be placed in a Google Drive only accessible by the primary authors and thesis advisor with password protected accounts. Upon completion, one copy of the manual will be made accessible by the Stanbridge University LRC, pending permission.

Clinical competency is the responsibility of clinicians, students, and educators using this manual. The AOTA supports the use of complementary health approaches in OT practice if they support meaningful engagement in occupation. It is up to the users of this manual to ensure competency in the area of mindfulness practice. The authors of the manual have provided resources in the beginning of the manual for self-assessment for readers. Using mindfulness as a treatment or preparatory activity with clients without proper training may trigger traumatic memories and experiences or leave clients feeling disoriented (Abrahams, 2018). If users of the manual do not believe themselves to be competent in implementing mindfulness interventions without training, the users have an ethical responsibility to pursue training to prevent harm to their clients.

Conclusion

Mindfulness practice has the potential to be a lifelong tool to support well-being in patients with various conditions. There are a variety of symptoms and clients that could be helped through the use of mindfulness from an OT perspective. Despite the fact that the use of mindfulness in occupational therapy has grown in recent years, there are still significant gaps in the literature surrounding mindfulness and OT. Through the

creation of this evidence-based mindfulness manual, we hope to support clinicians, students, and educators in helping them cultivate mindfulness and develop therapeutic use of self through practice and engagement. Our manual gives the reader the ability to begin their own mindfulness journey along with a foundation of the application of mindfulness with certain conditions.

Upon conducting a literature review, various conditions and symptoms were examined along with their implications for the application of a mindfulness-based approach. Although there is limited evidence-based research in this realm, the clinical applications for mindfulness techniques are indubitable once the clinician adopts the practices as well.

The purpose of this manual is to provide an introduction to mindfulness and its use in OT as of the time it was written. The authors wrote this manual with the intention to provide OT students, educators, and professionals with an evidence-based resource with interventions and assessments to use with certain populations based on the current literature. This manual is intended as a foundation and introduction for those interested in using mindfulness-based practice with clients in order to improve quality of life. As there continues to be more research conducted on the use of mindfulness-based interventions with clients in OT, new resources should be published to make the research accessible to educators, clinicians, and students. Now that the manual has been created, the next step is to conduct further research to test the validity of the use of this manual in education and clinical practice.

References

- Abrahams, M. (2018, April 10). The trauma dharma. [Blog post]. Retrieved from:
<https://tricycle.org/trikedaily/trauma-meditation/>
- American Occupational Therapy Association (AOTA). (2017). Occupational therapy and complementary health approaches and integrative health. *American Journal of Occupational Therapy*, 71 (Suppl. 2), 7112410020.
<https://doi.org/10.5014/ajot.2017.716S08>
- Bédard, M., Felteau, M., Mazanian, D., Fedyk, K., Richardson, J., Parkinson, W., & Minthorn-Biggs, M.B. (2003). Pilot evaluation of a mindfulness-based intervention to improve quality of life among individuals who sustained traumatic brain injuries. *Disability and Rehabilitation*. 25(13), 722–731.
- Bennett, J., & Lindsay, P. (2016). Case study 3: An acceptance commitment and mindfulness based intervention for a female hockey player experiencing post injury performance anxiety. *Sport and Exercise Psychology Review*, 12(2), 36-45.
- Breit, S., Kupferberg, A., Rogler, G., & Hasler, G. (2018). Vagus Nerve as Modulator of the Brain-Gut Axis in Psychiatric and Inflammatory Disorders. *Frontiers in psychiatry*, 9, 44. <https://doi.org/10.3389/fpsy.2018.00044>
- Centers for Disease Control and Prevention. (2019). *Caregiving for family and friends—A public health issue*. Retrieved from
<https://www.cdc.gov/aging/agingdata/docs/caregiver-brief-508.pdf>
- Congleton, C., Holzel, B. K., & Lazar, S. W. (2015, January 08). Mindfulness can literally change your brain. Retrieved from <https://hbr.org/2015/01/mindfulness-can-literally-change-your-brain>

- Crane, R. S., Brewer, J., Feldman, C., Kabat-Zinn, J., Santorelli, S., Williams, J. M. G., & Kuyken, W. (2016). What defines mindfulness-based programs? The warp and the weft. *Psychological Medicine, 47*, 990–999.
<https://doi.org/10.1017/S0033291716003317>
- Creswell, J. D., Irwin, M. R., Burklund, L. J., Lieberman, M. D., Arevalo, J. M., Ma, J., & Cole, S. W. (2012). Mindfulness-Based Stress Reduction training reduces loneliness and pro-inflammatory gene expression in older adults: a small randomized controlled trial. *Brain, behavior, and immunity, 26*(7), 1095–1101.
<https://doi.org/10.1016/j.bbi.2012.07.006>
- Dahlhamer, J., Lucas, J., Zeleya, C., Nahin, R., Mackey, S., DeBar, L., . . . Helmick, C. (2018). Prevalence of chronic pain and high-impact chronic pain among adults - United States, 2016. *Morbidity and Mortality Weekly Report, 67*(36). Retrieved from <https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6736a2-H.pdf>
- Green, E., Huynh, A. Broussard, L., Zunker, B., Matthews, J., Hilton, C. L., & Aranha, K. (2019). Systematic review of yoga and balance: Effect on adults with neuromuscular impairment. *American Journal of Occupational Therapy, 73*(1). 7301205150p1–7301205150p11. <http://doi:10.5014/ajot.2019.028944>.
<https://doi.org/10.5014/ajot.2019.028944>
- Greeson, J.M., Juberg, M.K., Maytan, M., James, K., & Rogers, H. (2014). A randomized controlled trial of Koru: A mindfulness program for college students and other emerging adults. *Journal of American College Health, 62*(4), 222–233.
<https://doi.org/10.1080/07448481.2014.887571>

- Hardison, M. E., & Roll, S. C. (2016). Mindfulness interventions in physical rehabilitation: A scoping review. *American Journal of Occupational Therapy, 70*, 7003290030. <https://doi.org/10.5014/ajot.2016.018069>
- Joshi, M. (2017, November 10). How does mindfulness affect the brain? Retrieved from <https://www.bupa.co.uk/newsroom/ourviews/mindfulness-my-brain>
- Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation. *General Hospital Psychiatry, 4*, 33–47.
- Kabat-Zinn, J. (2013) *Full Catastrophe Living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Bantam Books.
- Kabat-Zinn, J., Lipworth, L., & Burney, R. (1985). The clinical use of mindfulness meditation for the self-regulation of chronic pain. *Journal of Behavioral Medicine, 8*(2), 163–190. <https://doi.org/10.1007/BF00845519>
- Kolahkaj, B., & Zargar, F. (2015). Effect of mindfulness-based stress reduction on anxiety, depression and stress in women with multiple sclerosis. *Nursing and Midwifery Studies, 4*(4). <https://doi.org/10.17795/nmsjournal29655>
- la Cour, P., & Petersen, M. (2015). Effects of mindfulness meditation on chronic pain: A randomized controlled trial. *Pain Medicine, 16*, 641–652. doi:10.1111/pme.12605
- Nahin, R.L., Barnes, P.M., & Stussman, B.J. (2016) *Expenditures on complementary health approaches: United States, 2012*. Retrieved from the U.S. Department of Health and Human Services, National Center for Health Statistics website: <https://nccih.nih.gov/about/strategic-plans/2016/use-cost-complementary-health-approaches>

National College Health Association. (2018). Undergraduate student reference group.

Retrieved from <https://www.acha.org/documents/ncha/NCHA>

II_Spring_2018_Undergraduate_Reference_Group_Executive_Summary.pdf

Polatajko, H.J., Townsend, E.A. & Craik, J. (2007). Canadian Model of Occupational

Performance and Engagement (CMOP-E). In E. A. Townsend & H. J. Polatajko

(Eds.) *Enabling occupation II: Advancing an occupational therapy vision of*

health, well-being, & justice through occupation (pp. 22–36). Ottawa, ON: CAOT

Publications ACE.

Pritchard, K. T., Fisher, G., Rudnitsky, K. M., & Ramirez, R. D. (2019). Policy and

payment changes create new opportunities for occupational therapy in acute care.

American Journal of Occupational Therapy, 73(2), 1–8.

<https://doi.org/10.5014/ajot.2018.732002>.

Reid, D. (2011). Mindfulness and flow in occupational engagement: Presence in doing.

Canadian Journal of Occupational Therapy, 78, 50–56.

<https://doi.org/10.2182/cjot.2011.78.1.7>

Richardson, P., & McLaughlin, R. (2018) Teaching activities in occupational therapy. In

H. M. Pendleton & W. Schultz-Krohn (Eds.), *Pedretti's Occupational Therapy:*

Practice Skills for Dysfunction (8th ed., pp. 93–100). St. Louis, MO: Elsevier.

Rogers, H., & Maytan, M. (2012). *Mindfulness for the next generation: Helping*

emerging adults manage stress and lead healthier lives. New York, NY: Oxford

University Press.

Schmid, A., Grimm, L. A., & Chop, C. A. (2018). Yoga improves occupational

performance, pain-related disability, and activities of daily living for people with

chronic pain. *American Journal of Occupational Therapy*, 17(4s1),
<https://doi.org/10.5014/ajot.2018.72S1-RP203D>

Schultz-Krohn, W., Folti, D., & Glogoski, C. (2018) Degenerative diseases of the central nervous system. In H. M. Pendleton & W. Schultz-Krohn (Eds.), *Pedretti's Occupational Therapy: Practice Skills for Dysfunction* (8th ed., pp. 93–100). St. Louis, MO: Elsevier.

Son, H. G., & Choi E. O. (2018). The effects of mindfulness meditation-based complex exercise program on motor and nonmotor symptoms and quality of life in patients with Parkinson's disease. *Asian Nursing Research*, 12(2), 145–153.
<https://doi.org/10.1016/j.anr.2018.06.001>

Whitebird, R. R., Kreitzer, M., Crain, A. L., Lewis, B. A., Hanson, L. R., & Enstad, C. J. (2012). Mindfulness-based stress reduction for family caregivers: a randomized controlled trial. *The Gerontologist*, 53(4), 676–686.
<https://doi.org/10.1093/gerontgns126>

Wiseman, T. A., Curtis, K., Lam, M., & Foster, K. (2015). Incidence of depression, anxiety and stress following traumatic injury: A longitudinal study. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, 23, 29.
<https://doi.org/10.1186/s13049-015-0109-z>

Zou, L., Yeung, A., Chunxiao, L., Chiou, S. Y., Zeng, N., Tzeng, H. . . . Thomas, G. A. (2018). Effects of mind–body movements on balance function in stroke survivors: A meta-analysis of randomized controlled trials. *International Journal of Environmental Research and Public Health*. 15(6), 1292.
<https://doi.org/10.3390/ijerph15061292>

Appendix A

Manual

To reviewers: The manual was too large to include as a word document in this file. The manual has been sent as a separate attachment. Thank you.

Appendix B

Institutional Review Board (IRB)

B1. Institutional Review Board Approval**IRB Reviewer Feedback**

Reviewer Name: 1900-44
Student Name(s): Heidi Cuett, Karin Grathwohl, Madelyn Beltrami, and Tiffany Montes
Advisor Name(s): Cristina Scionti
Study Title: Understanding & Using Mindfulness as an Evidence-Based OT intervention: An Educational & Instructional Manual for Occupational Therapy students, educators and clinicians. Part 1B
Study ID: 01934
Decision: Approve
 Minor Revisions
 Major Revisions

Reviewer Comments:

Your project on mindfulness looks appropriate for your thesis project. All the best in developing a great mindfulness project.

B2. Modification Form for Institutional Review Board

**Modification Form
Institutional Review Board**

All researchers must receive IRB approval before implementing any modifications. Implementing changes without IRB approval is a violation of federal regulations and Stanbridge University IRB policies. This can result in the suspension of IRB approval and consequences for the participants, investigators, and Stanbridge University. Please submit forms via email: irb@stanbridge.edu.

MODIFICATION FORM

Name of Primary Investigator: Cristina Scionti Email: cscionti@stanbridge
 Title of Study: Project, manual for understand IRB Application Number: #01934

1. Please indicate what type of modification you would like to make by checking all that apply:
<input type="checkbox"/> Modifications to data instruments <input type="checkbox"/> Modifications to consent or assent documents <input type="checkbox"/> Modifications to recruitment materials or recruitment methods <input type="checkbox"/> Change in number of subjects <input type="checkbox"/> Change in inclusion/exclusion criteria <input checked="" type="checkbox"/> Change in research design/ procedures <input type="checkbox"/> Change in study site(s) <input type="checkbox"/> Change in study personnel <input type="checkbox"/> Other
2. Please explain the proposed modification(s) to your study.
ack review form completed by another expert on mindful
3. Outline how these proposed modifications may affect your study participants.
n/a
4. If applicable, describe how the current participants will be notified of these changes, if applicable.
n/a
5. Impact of proposed modification on the level of risk to subjects.
<input type="checkbox"/> Decrease <input type="checkbox"/> Increase <input checked="" type="checkbox"/> No Change
If necessary, explain how an increased level of risk to participants could be mitigated.
n/a

Modification Form
Institutional Review Board

FACULTY ADVISOR APPROVAL

A faculty advisor must sign this section if the modification request is for a protocol that was submitted by a student.

Cristina Scionti

Faculty Advisor Name




Faculty Advisor Signature

5/4/202

Date

I have reviewed and approved the IRB protocol modifications proposed by the student researcher. I understand that modifications may only be implemented after IRB approval has been issued.

B3. Modified Institutional Review Board Approval

IRB Application Number	01934
Date	05/02/2020
Level of Review	Exempt
Application Approved	X (Approved 07/2019)
Conditional Approval	
Disapproved	
Modification	X (Approved 05/20/2020)
Signature of IRB Chair	

Appendix C

Authorized Permission to Use Content

C1. Authorized Permission to Use Content from *Mindfulness For the Next****Generation***

Holly Rogers 2 <holly@korumindfulness.org>

Mon 10/7/2019 11:18 AM

Karin Grathwohl ✓



Hey Karin,

Very nice to hear from you and learn of the manual you are creating. I would be very happy for you to include information on Koru in your manual.

There is actually a revised version of Mindfulness for the Next Generation coming out this month. It would be great if you could use information from the revised version as we have changed quite a lot with Koru since the first book was published. Also, it might be helpful for you to look at our other book, the Mindful Twenty Something, as it is the companion text for the Koru program now.

Good luck with your work and take care,
Holly

**Holly Rogers**

KORU MINDFULNESS

Holly@KoruMindfulness.org

C2. Authorized Permission for CMOP-E Diagram



Canadian Association of Occupational Therapists
Association canadienne des ergothérapeutes

CAOT Publications ACE Copyright Request

October 22th 2019

Madelyn Beltrami
Stanbridge University
2041 Business Center Dr
Irvine, CA
92612

Dear Madelyn,

According to your request, you would like permission to use the CMOP-E diagram to be used in your thesis project titled "Understanding & Using Mindfulness as an Evidence-Based OT intervention: An Educational & Instructional Manual for Occupational Therapy students, educators and clinicians". Presented at the Stanbridge University in Irvine CA.

Figure 1.3 (CMOP-E) Canadian Model of Occupational Performance in Polatajko H., Townsend E., Craik, J. (2007). *Enabling Occupation II: Advancing an Occupational Therapy Vision for Health, Well-Being, & Justice through Occupation*. Ottawa, ON, CAOT Publications ACE. p. 23.

Permission for the above is granted on a one-time basis only and if you acknowledge the source. Please ensure that a full reference is printed with the figure to indicate that it is used with the permission of CAOT Publications ACE. This does not include the right for uses other than the above-mentioned, future editions and translations.

Thank you
Yours sincerely,



Stéphane Rochon
CAOT Publications Administrator

C3. Authorized Permission for COPM

Hi Madelyn,

I hope you enjoyed your weekend. Thank you for clarifying those details. Yes, you can certainly mention the COPM in your manual and provide a link to where people can purchase the COPM. Here is the link to purchase the COPM: <http://www.thecopm.ca/buy/> and further information on the COPM can be found here: www.thecopm.ca.

Let us know if you have any further questions.

Thanks,

Cindy

Cindy DeCola
Administrative Manager
COPM Inc.
www.thecopm.ca

Join the [COPM Newsletter Mailing List](#)

C4. Authorized Permission for *Full Catastrophe Living*

Request # 50495



Permissions Department, 1745 Broadway, New York, NY 10019
Telephone: 855-278-8634 Fax: 212-572-6066
Email: permissions@penguinrandomhouse.com

November 05, 2019

Madelyn Beltrami
26586 Mambrino
Mission Viejo, CA 92691

RE: Approval of FULL CATASTROPHE LIVING by Jon Kabat-Zinn

Dear Requester:

We have no objection to your use of the above material in your thesis, as requested in your letter of 11/02/2019, subject to the following conditions:

- Such material must be reproduced exactly as it appears in our publication;
- Full acknowledgement of the title, author, copyright and publisher must be given;
- If your thesis is ever considered for publication or broadcast, or commercially or privately reproduced in any manner not specified in your request, you must reapply for permission. Please be aware that a fee may be assessed for any such use.

Best wishes for the success of your paper.

Sincerely,

A handwritten signature in black ink that reads "C. Aguirre".

Christopher Aguirre, Permissions Assistant
Penguin Random House LLC
caguirre@penguinrandomhouse.com
212-366-2067

Appendix D

Feedback Forms

D1. Blind Reviewer Feedback Form**Feedback Form**

Reviewer Name: Blind Reviewer

Date: April 2, 2020

Name of Manual: 1B Understanding & Using Mindfulness as an Evidence-Based OT intervention: An Educational & Instructional Manual for Occupational Therapy Students, Educators and Clinicians.

1. Overall, is there consistency and fluidity between chapters in the manual? (Please circle a number)

Not at all 1 3 4 5 Definitely

Comments:

I think the chapters could be better organized. In particular, the last chapter "Stress and Mindfulness" that seems to be a catchall for everything that didn't fit elsewhere.

2. Are there sufficient resources provided to educate the reader about mindfulness interventions used in the occupational therapy setting?

Not at all 2 3 4 5 Definitely

Comments:

There was very little on where people could get mindfulness training. There are a number of organizations that provide training and/or certification pathways. It is generally suggested that people start off with taking a mindfulness course in their area. Some training organizations require attendance at a silent retreat before taking a training course. There was also very little information about how to use mindfulness in OT settings, and very few references to those OTs who have incorporated mindfulness into treatment.

3. Can these interventions and techniques be generalized into different contexts where occupational therapy students, educators, and clinicians will be working?

1 1 2 3 4 5 Definitely

Comments:
 I am going to be pretty insistent on this. OT students, educators and clinicians should not incorporate these “interventions and techniques” into practice settings unless the person has first developed a personal mindfulness practice, taken some formalized training, and reviewed Teacher Assessment Criteria. There should also be familiarity with the impact of trauma on mindfulness.

4. Is the visual presentation clear and aesthetically pleasing to the reader?

Not at all 1 2 3 4 5 Definitely

Comments:
 Yes, although I did not enjoy the two column format.

5. By utilizing these mindfulness interventions do you think the target population can use them to improve their and their client’s occupational performance?

1 2 3 4 5 Definitely

Comments:
 I will state again, that I do not think OT students, educators and clinicians should use these interventions without having first established a personal mindfulness practice, engaged in formal training, and reviewed the Teacher Assessment Criteria.

D2. Peer Group Feedback Form**Feedback Form**

Reviewer Name: Carly Rivera, Hannah Basha, Brooke Legaux, Annie Yao

Date: 5/7/20

Name of Manual: Understanding & Using Mindfulness as an Evidence-Based OT Intervention: An Educational & Instructional Manual for Occupational Therapy Students, Educators and Clinicians.

1. Overall, is there consistency and fluidity between chapters in the manual? (Please circle a number)

Not at all 1 2 3 4 **5** Definitely

Comments:

- Yes, the manual is laid out in a way that organizes each section appropriately.
- All information is relevant and flows consistently between chapters/sections

2. Are there sufficient resources provided to educate the reader about mindfulness interventions used in the occupational therapy setting?

Not at all 1 2 3 4 **5** Definitely

Comments:

- Great idea to add resources for mindfulness training programs
- Yes, great job citing evidence-based research throughout the Manual!

3. Can these interventions and techniques be generalized into different contexts where occupational therapy students, educators, and clinicians will be working?

Not at all 1 2 3 4 5 Definitely

Comments:

- Yes, for example in Chapter 5, (6) Koru Guided Meditations were provided to help people cope with varying levels of stress. Any of these 6 meditations can be upgraded or downgraded depending on the client abilities.

4. Is the visual presentation clear and aesthetically pleasing to the reader?

Not at all 1 2 3 4 5 Definitely

Comments:

- Don't need two columns for text. The double space between lines makes it difficult to read. I keep thinking there's a big gap between each word of the two columns.
- Not enough text for 2 columns.
 - Going off of this, I think the two columns would be ok if it were single spaced, but there might not even be a need for two columns after single spacing.
 - If keeping two columns maybe add a line between the columns so there is an obvious distinction
- Love the pictures
 - Great idea creating your own!
 - Yes, the visuals add a nice personal feel to it! Very creative with the occupation-based poses, too!

5. By utilizing these mindfulness interventions do you think the target population can use them to improve their and their client's occupational performance?

Not at all 1 2 3 4 **5** Definitely

Comments:

- The snapshots of the study's were great ideas to support the evidence behind the interventions provided
 - I would just make sure all of them have outcome results (not just outcome *measures*) to further support the intervention

Please provide any additional comments or suggestions:

- Confusion between page 15 & 16 (missing text?)
- On page 53 maybe add a section title (i.e. Appendix?) so the reader knows what those resources are for

THANK YOU!

preferences



Processed on: 12-May-2020 10:12 PM PDT
ID: 1323091544
Word Count: 7456
Submitted: 2

Thesis08: UNDERSTAN
& USING
MINDFULNESS A...
By Tiffany Montes

Document Viewer

Similarity by Source	
Similarity Index	
24%	
Internet Sources:	12%
Publications:	11%
Student Papers:	22%