

**Contemplative Creative Therapy (CCT):
A Novel Approach to Train the Embodied Mind**

Emma JM. Ates

LOJONG CENTER for Contemplative Creative Science

2024/ Rev2025

Abstract

This article introduces Contemplative Creative Therapy (CCT) as a novel approach to psychotherapy. Rooted in Buddhist and Western psychologies, Contemplative Creative Therapy merges contemplative science and creative art therapies within a humanistic framework. This article presents the origins of CCT and highlights the significance of integrating Buddhist psychology and contemplative creative approaches in mental health interventions. The central tenets of Contemplative Creative Therapy, including meditation, Contemplative Art practices, Person-Centered approach, and Art Therapy, are outlined within contemporary psychotherapy and mental health practices. Emphasizing the connection between Contemplative Creative Therapy and embodiment, the article demonstrates how Contemplative Creative Therapy can effectively train the embodied mind. Additionally, the paper advocates for further research into the neuroscientific correlates of Buddhist concepts of mind and the evidence-based use of specific techniques (e.g., contemplation, deconstruction, meditation) in psychotherapeutic practice. Ultimately, we propose incorporating Contemplative Creative Therapy under the umbrella of contemplative science.

Keywords: Contemplative Creative Therapy, Contemplative Creative Science, Contemplative Science, Contemplative Psychotherapy, Buddhist Psychology, Embodied Mind, Embodied Creativity, Psychotherapy, Meditations

Section 1

The Background of Buddhist Psychology & Dharma Art

Where did Buddhist Psychology and the Dharma Art Originate?

The Buddha (Siddharta Gautama was his birth name), also called Sakya-muni Buddha, was a prince from the Sakya clan. As a young adult, he had a deep calling to search and explore the meaning and experience of suffering, sickness, and death. To do so, he left his family, adopted an ascetic existence, and embarked on a personal meditation journey, which led him to discover the Dharma path. Eventually, he evolved into a revered teacher, imparting his wisdom to others. In the 6th or 5th century BCE, he wandered as a wandering ascetic throughout South Asia, and his followers identified themselves as *Sakyan-s or Sakya-sons* in ancient India (Cohen, 1999; Rhys Davids, 1928). Siddharta received the title of the Buddha, meaning "the Awakened One" (Bud in Skt.), "one who has awakened from the deep sleep of ignorance and opened his consciousness to encompass all objects of knowledge" (Monier-Williams et al., 2007; Buswell & Lopez, 2014). His teachings centered on ethical training and meditative practices, aiming to liberate individuals from suffering. The term "Buddhism," coined in the West during the 20th century, is commonly used as a translation for the Dharma of the Buddha, BuddhaDharma, in Sanskrit (Lopez, 2017).

The Dharma teachings initially spread throughout Asia, undergoing adaptation and transformation to align with the cultural contexts of each country. The Industrial Revolution precipitated the East-West encounter, and technological advancements increased travel opportunities, colonization, and scientific explorations by the privileged Western intelligentsia (military and academic). Despite the inherent inequality, this exchange initially shed light on Indian and Buddhist contemplative traditions and meditation practices focused on mental training

(Hallisey, 1995; McMahan, 2012). Furthermore, it facilitated the journey of Asian Buddhist teachers to Europe and the Americas, fostering cross-cultural interchange. This exposure, which began in the early 1920s, brought about a significant shift in Western philosophy and psychology, paving the way for the exchange and collaboration between Buddhism and science. In the twentieth century, North America witnessed the emergence of new organizations such as the Mind and Life Institute, which aimed to explore how contemplative science and practices could contribute to a better understanding of the mind and create positive change in the world (Mind and Life Institute, 2023). This integration between the Western scientific tradition and Buddhist psychology subsequently led to groundbreaking explorations and advancements in psychology, pedagogy, neuroscience, and mental health.

Buddhist Methodologies for Training the Mind

When delving into Buddhism, it becomes crucial to differentiate between its philosophical and psychological aspects, as well as how it evolved into a religion encompassing diverse Asian lineages and sects. Ancient texts depict the Buddha as a sage who wandered and engaged in debates about life, death, suffering, and our perception of reality alongside his peers. Drawing a parallel in the Western world, we find a resemblance in the gatherings held at the Agora, where eminent Greek philosophers such as Socrates, Plato, and Aristotle deliberated on similar topics during a comparable period.

The fundamental Dharma teachings of Buddhism emphasize that all human experiences are characterized by three key aspects, known as the “three marks of existence,” namely, impermanence (anitya), dissatisfaction/suffering (dukkha), and the absence of an eternal essence (anātman). According to the Buddha, understanding and embracing these marks are vital for

achieving liberation from attachment and suffering. Moreover, the path to awakening involves cultivating certain factors and qualities through mental training. Dharma teachings outline various contemplative practices in lists or discourses, guiding principles to training the embodied mind. The Four Noble Truths, the Five Skandhas, and the Noble Eightfold Path form the foundation of Buddhist philosophy and psychology. These teachings provide frameworks and methodologies to investigate the nature of the mind and reality across all Buddhist traditions. In his teachings, the Buddha endorsed the Four Noble Truths and presented the Noble Eightfold Path as a practical guide for training the embodied mind, cultivating insight, and overcoming suffering and its causes. According to Siderits (2019), the Buddha taught a path (*marga*) of training to undo the *samyojana* (mental fetter and conditioning), *kleshas* (mental afflictions and confusion) and *āsavas* (mental defilements) and attain *vimutti* (liberation). The Four Noble Truths and the Noble Eightfold Path offer valuable guidance on overcoming psychological and physical suffering.

The Buddha founded and greatly furthered the tradition of Inner or Mind Science, known as “*adhyatma vidya*.” This discipline is called “science” because it is an organized pursuit of knowledge about the mind. Its purpose is to free individuals from the negative aspects of the mind and help them realize its positive potential (Thurman, 1994, p.17). The root teachings discussed in this section have been applied to Buddhist psychology, psychotherapy, and contemplative psychotherapy as we understand them in the Western context. In recent times, the subjective empiricism of earlier Buddhism has started to merge with the Western scientific tradition, presenting the prospect of a simplified, secular and scientifically grounded Buddhist psychology. The emergence of these Buddhist-based approaches and interventions in psychological therapy highlights how Buddhist psychology has gained relevance among clinical professions and mental health in recent years (Kelly, 2008).

Origination of Buddhist Contemplative Arts

Over the years, numerous rules have been developed to depict the Buddha and convey Buddhist symbolic imagery. These guidelines adhere closely to the ancient Indian customs of iconography and iconometry, regarded as sacred and elevated art forms (Lahdrepa & Davis, 2017). Various sources widely emphasize that traditional Buddhist art serves a purpose beyond mere aesthetics; its primary function is to embody the teachings of the Buddha and foster meditation practices (Trungpa, 1975; Patry Leidy, 2008; Lahdrepa and Davis, 2017;). Lahdrepa and Davis (2017) elaborate on this concept in their book titled “The Art of Awakening: A User’s Guide to Tibetan Buddhist Art and Practice”:

Visual representations of the Buddha and Bodhisattvas, as well as statues and paintings, are being used as external objects for contemplation and meditation practice. These visual representations are symbols of the supreme qualities of the Buddha and Bodhisattvas that one aspires to cultivate within self and for the benefit of all sentient beings.

As previously discussed, the Industrial Revolution played a significant role in the spread of Buddhism across different countries. In Asia, each nation could adapt the core Buddhist principles to fit its unique cultural, religious, social, and political contexts (McMahan, 2012). The Buddhist Dharma Art also underwent a similar process of integration and development, aligning with the specific cultural traditions of each country in the East. However, a variation in Buddhist ‘supreme art’ developed with the sect known as Ch’an (Zen in Japan; Skt. Dhyana) a few years after Buddhism arrived in China and Japan. The Chinese Buddhist Ch’an school foundations are based on the “Flower Sutra.” Addiss (1989) described the genesis of Zen through the Flower Sutra:

Zen is said to have begun with a visual allusion. One day, the Buddha did not give his usual verbal sermon to his followers but simply held a flower in his hand. A single disciple—Mahākāśyapa—understood this wordless message, and Zen was born (p.6).

Within Zen, the Flower Sutra communicates the ineffable nature of tathātā (*suchness*), and Mahākāśyapa's smile signifies the direct transmission of wisdom without words.

Davey (2007, p.28) introduces the origins of Zen and its Ways:

The Zen Buddhist sect originated in India in the sixth century. Its originator is generally considered to be the monk Bodhidharma (Daruma in Japanese). Shortly after establishing Zen, in about A.D. 520, he left for China, where, according to oral tradition, Daruma sat facing a wall – “wall-gazing” practice - for nine years until he attained enlightenment. Zen, in its link of meditation to daily activities, has made a deep impression on the Japanese Do; indeed, the Ways have been described as “plastic Zen.” Zen stresses the avoidance of self-deception, and the Ways have long served as a “reality check” (p.29).

Zen developed various Japanese Ways (Do) with multimodal training methodologies and practices. These include Hitsuzendo (the Way of Zen calligraphy, also called Zenga), Kado (flower arrangement), Togeido (the Way of pottery), Kodo (the Way of incense), Shodo (the Way of the brush), as well as martial arts like Judo, Kendo, Karate-do, and numerous others. While each of these modalities contributes to the training of the embodied mind, a detailed exploration of each multimodal “Way” of training is beyond the scope of this paper. It is worth noting that the origins of the Do practices can be traced back to Chinese Taoist teachings, which were later imported to Japan and referred to as Dokyo (combining “do,” meaning Tao, and “Kyo,” meaning teachings) and arts (Davey, 2007, p.22). Addiss (1989) explained the tradition of Zenga, which describes painting and calligraphy by Zen monks from 1600 to the present:

In other Buddhist sects, accomplished craftsmen have produced images with care and precision to be radiant, idealized, and awe-inspiring. The works were created neither “for art’s sake” nor at the bidding of wealthy patrons, but rather to aid meditation and to lead toward enlightenment. The translation from mind and spirit to paper was spontaneous. These works distill the essence of Zen experience into strokes of the brush. Zen art, as a part of Zen training, has a long history. Zen art had a double function: it was a form of active meditation for the creators of the works and a method of visual instruction for those who received them (pp.6-7).

Over the centuries, Zen Buddhism evolved and transformed until it reached Western societies. Buddhist teachers who immigrated to Europe and North America were crucial in introducing Zen Buddhist teachings and art practices to the West. Notable figures like D.T. Suzuki, Chogyam Trungpa Rinpoche, and Thich Nhat Hanh adapted the Zen Ways for the West into Contemplative Arts, simplifying and preserving its connection to the Dharma. Shambhala International (1994-2023) states that Contemplative Arts are rooted in Chögyam Trungpa's teachings on direct perception and directly inspired by Dharma Art and Shambhala Art. Dharma Art embodies art that emerges from a meditative state of mind, infusing wakefulness and awareness into the creative and viewing processes through the integration of contemplation and meditation. Dharma art teachings morphed into Contemplative Arts to present secular artistic and creative disciplines that fuse traditional Indo-Tibetan and Zen Buddhist teachings into Western life.

Integration of Buddhist Psychology with Contemplative Arts for Training the Mind

Various methodologies are found within Buddhist teachings, each influenced by the viewpoints of the different Buddhist schools. Consequently, condensing the vast scope of contemplative arts methods is difficult. Contemplative Arts practices originate from the Indo-Tibetan and Zen Buddhist traditions. According to Shambhala International (2007), Contemplative Art practices were initially developed by Chögyam Trungpa as non-religious practices for attaining enlightenment, drawing inspiration from Indo-Tibetan Buddhism and Zen (Ates, 2017). It is important to note that Chögyam Trungpa customized Shambhala Tantric Tibetan teachings and methodologies in the Western world to cater to the needs of students in that region. Tibetan and Zen influences, Daoism, and other traditions shaped these teachings. In his book "The Teacup and the Skullcup: Where Zen and Tantra Meet," Chögyam Trungpa (2007) comprehensively explores the Zen arts (Zenga) and their connection to tantric teachings.

Trungpa's association with Shunryu Suzuki Roshi, a notable Japanese Zen master and one of the pioneering instructors who introduced Dharma to the Western world, significantly influenced his approach. Consequently, this affiliation led to specific aspects and elements in Shambhala Buddhism derived from Zen rather than Tibetan Buddhism. Dharma Art went through a metamorphosis, progressing into the realm of Contemplative Art practices. In his book "Place Your Thoughts Here: Meditation for the Creative Mind," Saitzyk (2013) elaborates on this concept:

In essence, Trungpa Rinpoche's approach was to see things as they are rather than merely thinking or imagining how they are. He taught us to directly experience art, art-making, and the nature of mind. (p.xi).

Contemplative Arts involve a range of meditation practices that are built upon mindfulness and awareness. These practices employ various methodologies of gradual training to cultivate ‘direct perception’ and *suchness* while reducing the tendency to constantly conceptualize and intellectualize experiences, which can lead to overthinking and negative rumination.

Within the framework of Contemplative Arts, there is an exploration of the five skandhas - the processes of the self, mind and consciousness. This includes engaging in spontaneous awareness practices or directly experiencing the mind. Berzin (2023) asserts that the five skandhas offer a systematic technique for understanding and deconstructing our life experiences, ultimately discovering the root causes of suffering and sorrow. Buddhist psychology complements Contemplative Art practices as it involves the investigation and training of the mind and consciousness through expressive and creative multimodalities. These modalities utilize somatosensory expressions that can be visual representations, sounds, touch, smell, taste, and movements. Through creative modalities, Contemplative Arts methods explore thoughts, emotions, physical sensations, and the interconnected experiences of the mind and body. Essentially, these methodologies can be viewed as creative and experiential meditation methods of “spontaneous awareness” that aim to cultivate “direct perception,” “non-conceptual knowledge,” and insight. It is important to note that Contemplative Art practices do not focus on the final art product but on the art process itself (CMind, 2015). This article emphasizes the significance of Contemplative Art practices as methods and approaches that deconstruct and reconstruct the self. These practices incorporate mindfulness, awareness, compassion, and cognitive reification to facilitate this transformative process.

Section 2

Modern Buddhist Psychology

Over the last twenty-six centuries, Dharma teachings have been used by Buddhist monks, scholars, and lay practitioners to help individuals liberate themselves from suffering. In this article, we concur with the definition of “Buddhist psychology” as presented by Tirch et al. (2017), referring to it as a different framework or collection of perspectives on reality (philosophy), a particular understanding of the human mind and behaviour (psychology), and a specific set of guidelines for moral conduct (ethics). Buddhist psychology presents an alternative approach to exploring and assessing the human experience, comprehending the interconnectedness of cause and effect and the dynamic interplay between reality and consciousness (Tirch et al., 2017).

During the colonial era, Western Orientalists collaborated with progressive Buddhists, leading to the emergence of Modern Buddhism. The field of Buddhist psychology went through a transformative phase, where the concepts of Dharma philosophies and mind-training methodologies expanded over time. This expansion occurred along three distinct paths known as "vehicles" or "yanas" - Theravāda, Mahayana, and Vajrayana. As these teachings spread globally, each path evolved in its own way. With the integration of modern Buddhist psychology into North American and European cultures, certain religious elements and rituals were stripped away from the teachings and practices, rendering them more secular (McMahan, 2012).

In the realm of Contemplative Creative Science (CCS), the reference to Buddhist Psychology and its application within a Buddhist-based framework pertains to the gradual training of the embodied mind to reduce suffering. As previously mentioned, a fundamental principle of the Noble Eightfold Path is moral virtue, also called ethics. In Buddhism, ethics or morality is encapsulated by the term *sīla* (Pāli). *Śīla* serves as guidelines or a code of conduct that fosters

harmony, self-control, and non-violence. It can be described as purposeful adherence to ethical behaviour in alignment with one's dedication to liberation and a wholehearted commitment to what is beneficial ("Buddhist Ethics," 2023).

During the opening of the Embodied Philosophy's conference on "Embodied Brain - Yoga, Neuroplasticity, and the New Scientific Paradigm," Loizzo (2023) expressed enthusiasm about the intriguing fusion of science and spirituality, or science and contemplative practices. He emphasized that this convergence enables a more comprehensive and genuine exploration of the mind (p.1-13). It represents a novel multidisciplinary field of mind science, where contemplative and experiential approaches intersect with modern science. This paper introduces Contemplative Creative Therapy (CCT) as a novel approach that combines contemplative Buddhist principles with Western wisdom, creativity, and science. We emphasize the significant potential of integrating Buddhist psychology and contemplative creative approaches into clinical interventions to address mental health concerns effectively.

Integration of Buddhist Psychology in Mental Health

The pioneering scholars Thomas W. Rhys Davids (1843-1922) and Caroline A. F. Rhys Davids (1857-1942) were the first to characterize Buddhism as psychology. They referred to Buddhism as a "science of mind," highlighting its psychological aspects and pointing out the parallels and overlaps between Buddhism and Western psychology. These similarities include descriptive phenomenology of mental states, emotions, behaviours, and theories of perception and unconscious mental factors. Additionally, they emphasized the profound discussions of the mind in various Buddhist literature, which they unequivocally linked to several Western psychological schools of thought. Consequently, Buddhism gained significant recognition and credibility in the West (Mc Mahan, 2012, pp. 167-169).

Meditative techniques were recognized for their close connection with modern psychology and are sometimes referred to as a method of internal and external observation and investigation akin to empirical science. They are seen as a psychological method for delving into the deeper, unconscious corners of the mind (Thurman, 2021, p.27). Over time, meditation evolved from being viewed solely as a transcendental technique for ascetics who have renounced worldly life. It transformed into a contemplative practice aimed at self-discovery, self-discipline, self-transformation, and the promotion of physical and mental well-being, detached from specific doctrinal or religious frameworks (Mc Mahan, 2008, p.184).

The 21st century has seen Buddhist psychology's emergence and widespread influence in Western cultures, strongly emphasizing psychological therapy and promoting mental health and overall well-being. Western Buddhism and the concept of “Buddhist Modernism” (McMahan, 2008, p. 62) experienced exponential growth in the 1960s and 1970s, particularly in the United States. According to Hussain (2010), throughout the 1960s, news of multiple accounts of extraordinary acts of bodily control and altered states of mind reached the West through Eastern Yogis. This influx of information led many scientists, healthcare professionals and laypeople in the West to focus on the clinical effects of meditation on health. Mindfulness meditation was embraced as a valuable technique for managing stress and restoring mental and physical well-being in individuals.

During the 1970s, there was a significant advancement in psychotherapeutic methods using "mindfulness" techniques (Kato, 2016). Jon Kabat-Zinn's mindfulness-based stress reduction (MBSR) emerged during this period, representing a significant milestone. Students of Kabat-Zinn, namely Zindel V. Segal, J. Mark G. Williams and John D. Teasdale, later developed mindfulness-

based cognitive therapy (MBCT), leading to the widespread integration of “mindfulness” in Western cognitive behavioural therapy practices (Kato, 2016).

Mindfulness and Art Therapy: Its Application in Clinical Settings

Mindfulness can be described as a unique way of directing our attention, where we consciously and purposefully focus on experiencing the present moment without judgment (Kabat-Zinn, 2003). Thich Nhat Hanh (1998) defines mindfulness as the ability to be fully present in each moment of our lives, enabling us to acknowledge the unfolding events within ourselves and our surroundings. Recent research indicates that incorporating mindfulness into therapeutic approaches yields positive outcomes in treating various aspects of mental health. Ivanovski and Malhi (2007) further underscore these points by stating:

Mindfulness-based therapeutic interventions appear to be effective in the treatment of depression, anxiety, psychosis, borderline personality disorder and suicidal/self-harm behaviour. Mindfulness techniques involve the expansion of attention in a nonjudgmental and nonreactive way to become more aware of one’s current sensory, mental and emotional experiences. This technique requires expanding awareness.

The impact of MBIs on mental health has been notable. Multiple studies indicate that MBIs benefit psychological symptoms, effectively reducing anxiety and depression (Abbing et al., 2018; Flett et al., 2017; Carsley et al., 2015; Peterson, 2014).

The integration of Mindfulness-Based Interventions (MBIs) and art therapy has naturally evolved with the growing popularity of MBSR, MBCT, and DBT training among clinicians and mental health professionals. Art therapy can be seen as a comprehensive approach that combines art education, neuroscience, psychology, anthropological concepts, and biological insights

(Bucciarelli, 2016). This field encourages art therapists and psychotherapists to adopt a multidimensional model and draw on diverse sources of information and understanding to offer holistic, integrative perspectives. In 2000, Peterson and colleagues developed a formal Mindfulness-Based Art Therapy (MBAT) protocol. MBAT aims to enhance both psychological and physical well-being. While clinical research on MBAT and similar programs is still in its early stages, researchers are actively exploring the effects of integrating mindfulness-based practices with art therapy. Rappaport (2014) suggests combining mindfulness and creative arts can foster engagement in the present moment, resulting in more profound attention, emotional regulation, and body awareness than practicing mindfulness alone. Therefore, it is essential to highlight the current findings and potential benefits of using MBAT to relieve symptoms among patients with chronic medical conditions.

According to Davis (2015), mindfulness-based practices serve three primary objectives. Firstly, they aim to relax the mind and body. A recent study by Joshi et al. (2021) provides additional evidence supporting this assertion, highlighting that mindfulness and creative art practices facilitate activating the parasympathetic nervous system. These processes shift our awareness away from repetitive thoughts and towards heightened emotions and sensations, ultimately triggering a relaxation response and reducing mental distress. The second and third functions of mindfulness-based practices are to raise awareness about present-moment experiences and to regulate emotions.

In their book, *Art Therapy and the Neuroscience of Relationships, Creativity, and Resilience*, Hass-Cohen & Findlay (2015) go on to explain that:

Exploring the creative unconscious and making it conscious involves the neurological processing of integrated sensory-visual and emotive-cognitive experiences. Creative

cognitive processes may or may not be conscious. Thus, the integrated function of creativity is driven by sensory felt experiences, implicit and explicit emotions, feelings, cognitions, and thoughts, representing an interconnected function of several specific neural networks.

Building upon these ideas, Joshi et al. (2021) provide further elaboration:

Mindful art is believed to facilitate a sense of immersion, flow, focus, calm, and being in the present moment. It is often suggested that colouring induces a mindful or meditative state, reduced activity in the amygdala, or changes in brain wave activity. During the MBAT sessions, the patients learn to reconstruct meanings, minimize overidentification with illness, and negotiate experiences and life events on their terms.

In summary, integrating creative and expressive art therapy within mindfulness-based interventions is a highly effective therapeutic approach for treating mental health struggles and disorders.

Section 3

Defining Contemplative Science & Contemplative Psychotherapy

As mindfulness-based therapies evolved throughout the years, there was a need for a broader framework encompassing the various forms of meditation, yoga, and artistic and bodily practices and techniques used in the field of MBIs. Consequently, “contemplative” emerged as a new framework, encompassing the diverse psychotherapies connecting mindfulness and related techniques (Loizzo, 2017, p.1). The Center for Contemplative Research, which was established in 2022 in the United States, defines Contemplative Science as “a discipline of first-person,

subjective inquiry into the nature of the mind and its role in Nature, which utilizes methods for developing refined attention, mindfulness, and introspection to directly observe states of consciousness and mental functions in their relationship with the body and the physical world at large.” The center affirms that:

We need a broader conception of contemplative science because the scope of science itself is expanding, and contemplative science provides the empirical methods that we need to enable this expansion. The content of science once included only the object pole of experience. Seeking a purely objective account of reality, scientists tried to “step out of the picture and stay hidden behind the camera.

The evolving nature of contemplative science becomes evident through ongoing research exploring objective and subjective approaches. This progress holds the promise of further investigating the advantages of incorporating contemplative practices within mental health and clinical contexts, fostering a continued exploration of their benefits.

The Center for Contemplative Research further adds that:

But scientists increasingly understand that a purely objective view of reality is not only incomplete but untenable. Reality consists of both third-person objects and first-person subjects, and we need to understand how the two are related to describe reality fully. Contemplative science offers the rigorous, replicable methods — the contemplative technology — that science needs to expand its scope and encompass all of reality, including the subject pole of experience.

This brings us to the concept of contemplative psychotherapy and its efficacy as a creative tool to re-train the embodied mind. Contemplative psychotherapy draws inspiration from both ancient Buddhist practices and the clinical methodologies of Western Psychology, specifically the

Humanistic school. Combining psychotherapy with personal contemplative techniques aims to bring about a profound transformation of the mind and alleviate stress. In his book, “Advances in Contemplative Psychotherapy” (2017), Loizzo provides further insights into this approach:

Meditation and psychotherapy appear to have their effects by the same common pathway: a sustained strategic amalgam of two complementary mechanisms. Both practices reduce stress using relaxation techniques to lower sympathetic arousal and boost vagal tone, and both also simultaneously enhance learning using techniques that heighten attention and promote neural plasticity (Siegel, 2010a; Porges, 2011).

Contemplative Creative Science

Contemplative Creative Science (CCS) is a branch of Contemplative Science that integrates principles from Buddhist Psychology and Western psychology. CCS is a discipline that engages in first-person, subjective exploration (CCR 2023) of the embodied mind, the nature of reality, and its impact on our cognitive, emotional, spiritual, and behavioural systems – encompassing body, speech, and mind. Using a multimodal contemplative creative approach, CCS aims to develop formal and informal methodologies for alleviating suffering through Contemplative Creative Therapy (CCT). Within the CCS framework, there is a focus on using multimodal gradual training to directly observe and transform cognitive functions, mental processes, and content, as well as their influence on personal mental health and well-being, relationships with others, the environment, and the wider universe.

CCS presents a modified version of traditional Buddhist psychology, incorporating a Buddhist-based framework that addresses suffering and its associated distortions. Through applying contemplative creative methods and practices, individuals can develop increased

awareness, direct perception, and understanding of their fundamental human nature. These practices also tap into our inherent capacities for embodied happiness and health, offering a comprehensive and inclusive path toward healing.

Early studies focused on contemplative creative science and practices involving mandala techniques and interventions. These included the use of the MARI® Mandala, the Mandala Model of Self (Hwang, 2011), and Chinese Calligraphic Handwriting (Kao, 2010, 2014; Frame, 2002, 2006; Hwang, 2011, 2019; Khademi et al., 2021;). The pioneering use of the Mandala method in personal artwork and therapeutic settings can be attributed to Carl Jung, a Swiss psychiatrist and psychoanalyst, who believed in its potential to heal and integrate one's personality (Frame, 2006). Over time, various methodologies and research have demonstrated that Mandala therapy and interventions are safe and accessible activities (Carsley et al., 2015).

In the context of contemporary life, it is crucial to employ preventative measures, strategic interventions, and effective stress reduction techniques. Common interventions utilized for stress reduction include relaxation techniques, meditation, biofeedback training, and outlets for emotional expression. Chinese Calligraphic Handwriting (CCH) has emerged as an additional therapeutic approach to stress intervention (Kao et al., 2014, p. 47). Over the past three decades, research has demonstrated the positive effects of practicing CCH, including improvements in visual attention, perception, cognitive activation, physical relaxation, emotional stability, and motor coordination (Kao, 2010). In fact, the effectiveness of CCH in reducing stress is comparable to that of meditation, a well-established stress reduction method (Kao et al., 2014).

Section 4

Defining Contemplative Creative Therapy

This paper explores a novel intervention model called Contemplative Creative Therapy (CCT). CCT represents an innovative approach integrating Meditation, Contemplative Arts, Person-and Others-Centered, and Art Therapy within contemporary psychotherapy and mental health practices. At first glance, the “contemplative” psychotherapy concept may appear contradictory. According to Loizzo (2017, p. xxvi):

“Contemplation” and “contemplative”—terms derived from the Latin *contemplatio*—have historically been used to describe a discipline of individual and group reflection considered central to introspective learning, especially the meditative and ethical learning practiced by lay and professional people in traditional Western religious communities. Psychotherapy, on the other hand, has evolved as a healing discipline of introspective learning based mainly on a dyadic method of reflection, informed by scientific views of human nature, and practiced in confidential relationships by mental health professionals and their clients in modern clinical settings.”

Contemplative Creative Therapy (CCT) is a holistic and integrative therapeutic model combining Buddhist and Western psychology elements. It falls under the third wave of cognitive behavioral therapies (CBT), which uses a person- and other-centered approach and is influenced by four primary sources. These include the ancient wisdom of the Buddhist Dharma tradition, Modern Buddhist Psychology, the interdisciplinary field of Contemplative Science and Arts, the clinical traditions of Western Psychology with the Humanistic School focused on Art Therapy, with the most recent discoveries in contemplative neuroscience and embodied creative approach.

Employing the CCT approach and methods can lead to a deeper understanding of the embodied mind's functions, processes, and content, leading to the cultivation of expanded consciousness including but not limited to qualities such as compassion, wisdom, and spirituality. This heightened awareness and compassion empower clients and practitioners, granting them increased autonomy and choice in navigating their situations and relationships. The spiritual aspects we mention here in Buddhist Psychology are informed by the teachings on interdependence, impermanence, and vacuity. These empower clients to contemplate and explore creatively on their two selves, the ego and the 'Buddha-Nature' – what we can translate as our spiritual nature before social self-constructs take over. Consequently, it offers invaluable assistance to psychotherapists by equipping them with practical methods, tools, and practices to train the embodied mind and create an equilibrium between the two selves.

Embodied Contemplative Creative Practices

The core elements of Contemplative Creative Therapy (CCT) consist of psychoeducation, meditation, and contemplative creative practices (CCPs), all aimed at training the embodied mind. When exploring CCPs, it is essential to delve into the concept of embodiment and the embodied mind, as it involves investigating and reflecting upon the cognitive and behavioural functions and processes of both the mind and body. Creative embodiment encompasses the imaginative manifestation of human senses, interactions, and communication, encompassing emotions, thoughts, speech, vision, tactile sensations, and more. The notion of creative embodiment underscores the potential therapeutic benefits of kinesthetic art creation, movement, playfulness, and tactile experiences (Hass-Cohen & Findlay, 2015). In cognitive neuroscience, Francisco Varela played a significant role in introducing the term 'embodied mind.' Within the embodied mind theory framework, Varela viewed the mind as inseparable from the body, interconnected

with others and the surrounding environment (Schmalzl et al., 2014). As further elucidated by Fossa (2018):

From Varela's perspective, the embodied mind theory allows us to integrate the reflective-cognitive experience with the lived phenomenological experience as two dimensions of human nature. The perspective of embodied cognition, from Varela's point of view, would allow access to a holistic understanding of background knowledge or knowledge, which is not restricted to a propositional, denotative and declarative knowledge, but rather, a holistic and total knowledge, such as cognitive-affective unit.

The embodied mind emerged as a counterpoint to conventional explanations of cognition, which posit that individuals depict the world through abstract mental symbols and manipulate them for thinking purposes (Michalak et al., 2012).

When considering the mind as embodied, we consider the brain part of a more extensive network encompassing the nervous system and the sensorimotor faculties of the overall organism (van der Schyff et al., 2018; Gallagher, 2011). The contemplative arts are experiential practices that develop and cultivate an understanding and familiarization of mental and physical body stimuli, sensations, feelings, perceptions, interoception and kinesthetic.

According to Khoury et al. (2017):

The body functions as a constituent of the mind rather than a perceiver or an actor serving the mind, and thus, is directly involved in cognition. Thus, embodiment is a key element in explaining the performance of cognitive tasks. The term embodiment therefore expresses the idea that knowledge and experience are grounded in bodily states and specifically in the brain's modality-specific systems (p.).

Furthermore, at the core of Theravada Buddhist mindfulness lies the essential principle of nurturing an understanding of the body and its specific sensations (Gunaratana, 2002). It is worth noting that all Buddhist schools advocate the inseparable connection between physical and mental states (Havery, 1993). Additionally, empirical evidence highlights the positive outcomes resulting from mind-body skills training, which significantly emphasizes body awareness. This training encompasses various formal mindfulness practices like mindful eating, mindful walking, and mindful breathing, along with techniques such as autogenic training, diaphragmatic breathing, biofeedback, and expressive movement. Substantial impacts of these interventions include heightened empathy and resilience in healthcare professionals (Kemper & Khirallah, 2015), reduced stress levels and enhanced self-care among medical students (Greeson et al., 2015).

According to researchers, creativity is a unique combination of cognitive processes, including divergent and convergent thinking, conceptual fusion through analogical and metaphorical thought, mental imagery, and analogical reasoning (Ward & Saunders, 2003; Runco, 2007). Furthermore, it is widely recognized as a skill that can be learned and enhanced (Scott et al., 2004; Ward & Kolomyts, 2010). However, despite this understanding, there is still a shortage of established teaching methods and practices that consistently nurture creativity (Sawyer, 2017).

In the field of CCS, our objective is to develop embodied mind workshops, training programs and therapeutic frameworks for the embodied mind. The CCT model aims to delve into the potential advantages of employing different meditation techniques, both internally and externally focused, along with creative forms of expression like photography, brushwork, and movement. By exploring the embodied mind through diverse mediums, we aim to enhance creative performance and improve problem-solving results (Frith et al., 2019). CCTs are designed to encompass internal and external experiences, creating a holistic, integrative approach to the

embodied mind. By embracing an embodied perspective, we reassess the traditional boundaries between neural processes and other bodily functions such as metabolism, thermodynamics, and muscular activity. This perspective acknowledges that the brain is an essential component of a more extensive interconnected system that includes the nervous system as a whole and the sensorimotor abilities of the organism (Gallagher, 2011).

Contemplative Creative Therapy (CCT) Theory and Core Principles

CCT combines Buddhist psychology and Western phenomenology, Contemplative Psychotherapy and Contemplative Arts, a person-centered and other-centered approach, with creative art therapies utilized for various purposes. The focus is training the embodied mind through first-person inquiry, considering everyone's cultural identity. This training aims to cultivate mindfulness, insight, and compassion. The Person-Centered (PC) approach originates from the Humanistic School of Western Psychology, which Carl Rogers describes as a natural phenomenon characterized by a profound sense of presence, like Eastern philosophies (Jooste et al., 2015). Inspired by Eastern meditation techniques, mindfulness encompasses a proficiency characterized by increased self-awareness and embracing the present circumstances. It fosters an open-minded approach and discourages rigid adherence to predetermined scientific objectivity, especially in service delivery (Jooste et al., 2015).

Recognizing our clients' diverse circumstances and backgrounds, including their religious, spiritual, cultural, gender, and professional affiliations, is paramount. Through the practice of eight levels of embodied mind training, we invite clients to cultivate the ability to adapt to their unique situations. By understanding the potential obstacles and challenges that may arise in their thinking and way of being, we encourage them to approach themselves and others with compassion and

kindness. This training helps clients develop attention, concentration, and mindfulness skills, fostering a sense of calmness and stability. They also learn to observe and deepen their understanding of the mind-body connection. Additionally, the process involves cultivating self-compassion, clarifying core personal values, and extending these qualities to their relationships with others, all beings, and the environment.

CCT stands apart from conventional counselling approaches by incorporating holistic integrative psychoeducation (neuroscience, body systems, biosystems, and many more) into the framework of the embodied mind. The framework also guides the fostering of a safe therapeutic relationship. This comprehensive approach addresses various aspects, including experiences, perceptions, habits, thought triggers, patterns, discrimination, biases, and more. By doing so, clients are empowered to cultivate mindfulness and awareness of unhelpful thinking patterns and emotional strategies that hinder their mental health and well-being. The ultimate objective is to enhance clients' awareness and clarity of consciousness, enabling them to reconnect with their inner wisdom. This is achieved through the utilization of contemplative creative methods and practices. Additionally, multimodal holistic and integrative methods play a vital role in CCT, particularly at the beginning of the therapy process. Loizzo (2017, p.39) states:

We also have ample clinical reasons to foster a multiplicity of methods of psychotherapy and contemplation. This has to do not with any intrinsic superiority or neural specificity of one technique over another, but with the varied therapeutic needs of individuals with diverse learning styles or facing various challenges at different levels of healing and development.

Loizzo (2017, p.39) explains in his book *Advances in Contemplative Psychotherapy*, that the therapy discussed combines a comprehensive approach with a balanced blend of gradual

development and immediate pedagogical impact. The treatment aims to support a gradual contemplative healing journey, from verbal understanding to emotional engagement and embodied learning. Moreover, it seeks to accommodate individuals with different inclinations and specific needs, following the therapeutic approach of the Buddha, who tailored teachings like medicines to address the diverse afflictions of his students.

Drawing from the extensive research conducted on mindfulness-based and compassion-based interventions by the Nalanda Institute, the Mind and Life Institute, and the Contemplative Research Center, the contemplative creative approach and CCT skillfully integrate diverse therapeutic methodologies across different learning methods.

Contemplative Creative Therapy (CCT) Model

The CCT intervention model combines Buddhist and Western Phenomenological principles and Person-Centered and Other-centered approaches to provide a gradual and individualized process. It employs contemplative creative practices and meditation tailored to each client's cultural circumstances and conditions. In traditional Buddhism, two frameworks for mind training exist the gradual and the direct approaches. The gradual and progressive approach entails step-by-step or level-by-level training, allowing practitioners to proceed at their own pace. Through the gradual CCT approach, clients can progressively integrate new practices, skills, and habits into their embodied mind system. As clients engage in this progressive training, they gradually understand and become familiar with their embodied mind, including its functions, processes, and contents.

Eight Levels of Embodied Mind Training

1) Function

In the CCT model, psychoeducation is the backbone of the framework. Understanding the functions of embodied mind systems is essential to attaining optimal health and well-being tailored to one's unique circumstances and conditions. Psychoeducation develops an understanding of functioning and non-functioning in the embodied mind and how it cultivates suffering or health.

2) Intention

On the gradual training path, we educate clients to have a clear intention. It is about “immediate intention” or “intention in action;” the client must integrate a new way of thinking about intentionality and conscious intent and its effects on body, speech, and mind. Conscious intent brings a clear intention and positive motivation to install sustained enthusiasm, joyful effort, and purpose to cultivate regular meditation practices.

3) Attention

After clarifying and reinforcing function and intention, it is essential to consistently introduce the practice of meditation, specifically focusing on attention and concentration, to enhance awareness of one's experiences. By regularly engaging in brief attention exercises, the client begins to observe and become familiar with the embodied mind safely, allowing them to explore new experiences and determine how to effectively incorporate them into their daily lives using a "touch and go" approach. Once clients become comfortable with attention and concentration, they can cultivate a sense of calm by anchoring their attention on specific internal and external objects.

4) Mindfulness

We continue to train with mindfulness to stabilize mental states in the present-moment experience. Using the Four Foundations of Mindfulness, we gradually train the embodied mind to become accustomed to being in physical and mental states. We cultivate vigilance, stability, and awareness and observe and watch the body, feelings, objects of mind, and consciousness. We begin using the ‘Mapping of the Mind’ to follow where the mind goes and its functions (past, present, future, or imaginary).

5) Familiarization

In CCT, we engage in meditation and contemplative creative practices to better understand our embodied mind. Through the cultivation of attention and mindfulness, we become more intimately acquainted with the various mental states, associations, and projections of our experiences and understand how they relate to ourselves, others, and the world around us. By developing the ability to ***observe, recognize, and name*** these mental formations, we foster an ongoing growth of awareness and mindfulness. We begin to explore non-judgment and acceptance of our experiences of mental functioning and formations. We continue to use the ‘Mapping of the Mind.’ (Appendix)

6) Deconstruction

Once we develop the skills of attentiveness, mindfulness, and awareness towards our mental states and mental formations, we can deconstruct the strategies, schemas, and patterns within our embodied mind system. Through contemplation, we can identify and deconstruct

various aspects, such as perceptions of self, relationships, patterns, habits, schemas, biases, and maladaptive behaviours. Dhal et al. (2015) referred to this deconstructive approach as a set of meditation practices that utilize self-inquiry to gain insight into perception, emotion, and cognition. These deconstructive meditation practices can focus on exploring the objects of consciousness or consciousness itself.

7) Contemplation

In the traditional Tibetan Buddhist approach to training the embodied mind, contemplation typically follows listening to the teachings of the Dharma. It involves self-inquiry and reflection on the teachings, their significance, and how they can be applied in formal and informal practice. According to Dhal et al. (2015), contemplation practice falls within the "constructive family" of meditation practices. These practices aim to cultivate and reinforce cognitive and emotional patterns that promote well-being. They strengthen a clear perception of reality, adherence to ethical values, and foster healthy interpersonal dynamics. Perspective-taking and cognitive reappraisal play essential roles in this style of meditation.

8) Applied Action

The CCT model offers clients a transformative journey consisting of eight levels. Throughout this process, clients develop valuable skills, resources, and practices that reduce their experience of suffering, enhance mental health and well-being, and cultivate a sense of balance in their daily lives. Clients are encouraged to explore and implement practices that resonate best with them, fostering a non-judgmental and self-compassion mindset while nurturing compassion in their relationships. CCT emphasizes the importance of discipline and consistency in utilizing new

skills, coping strategies, meditation, and CCPs within various circumstances and conditions. This holistic approach helps promote awareness, flexibility, gratitude, and contentment in everyday life, whether at home (with partners, children, and family), at work, or within the community.

Contemplative Creative Therapy (CCT) Specializations

At the Centre for Contemplative Creative Science (CCCS), we embrace meditation and CCPs that are designed to be holistic and integrative. Our approach encompasses a diverse range of modalities to train the embodied mind. Recognizing each person's individuality, we acknowledge their different personal connections to sensory experiences and unique creative inclinations.

Within the CCT specializations, individuals have the opportunity to receive training in four distinct areas at this time: Contemplative Photo Collage (CPC), Contemplative Photo Therapy (CPT), Contemplative Brush Method (CBM), Contemplative Bio-Based Therapy (CBBT). As we expand, we aim to incorporate additional embodied expressive modalities and methodologies, such as mandala, sound exploration, and movement practices. The CPT approach takes inspiration from Miksang Contemplative Photography (MCP), a method that uses photography as a tool to retrain the mind and body. The design and methodology of the CPT approach are rooted in the various levels of MCP. Initially developed for group therapy sessions with young individuals, the CPT approach is flexible and can be adapted to cater to different populations and individual therapeutic interventions (Ates, 2017).

Section 5

Challenges Associated with Teaching CCT

In Buddhist psychology, direct experience takes center stage. The training of a contemplative creative therapist balances psychoeducation and hands-on training. By delving into the depths of their own embodied mind through psychoeducation and personal experience, the contemplative creative therapist develops the ability to accurately understand and explore the embodied minds of others during therapeutic practices. The journey of self-exploration is facilitated through meditation and CCPs to cultivate body/mind awareness, wisdom, and compassion.

Through centuries of exploring the embodied mind in Asia, coupled with modern investigations in medical, psychological, and neuroscience fields regarding Buddhist psychology in the 21st century, new techniques in psychotherapy have surfaced. CCT is one such pioneering approach, which draws from both Buddhist principles and Western psychology, employing a Person-Centered methodology. CCT incorporates the foundational teachings of Buddhism, including the Four Noble Truths, the Noble Eightfold Path, the Four Foundations of Mindfulness, and the Four Boundless Qualities, as integral components of its psychoeducation and meditation methods. In the CCT model, the Noble Eightfold Path is adapted and refined, employing eight gradual levels to train the embodied mind.

Teaching CCT poses several challenges, particularly regarding the prerequisite knowledge and integration of foundational origins, concepts and meditation practices by practitioners and clinicians before delving into contemplative creative specializations. The Centre for Contemplative Creative Science adopts a three-tiered training structure to address these challenges:

1. Level one provides an overview of CCT's background and origins. It covers the historical context, definitions, and paradigms related to the spread of Buddhist teachings and religion in Eastern Asia, Europe, and North America through colonization and travel. Additionally, it explores how Dharma intertwined with creativity and art practices to disseminate teachings, adapting them to each new culture and evolving into distinct embodied contemplative creative practices incorporating novel meditation forms.
2. Level two focuses on establishing a solid understanding of Dharma teachings and their application based on individual circumstances. The aim is to consistently integrate these teachings into one's life to support clients on their respective journeys effectively. It is essential to clarify that the goal here is not to attain enlightenment or liberation, as traditional Buddhist training aspires to. We are not training to become monks or nuns, secluded from modern life. Instead, we seek to honour the rich tradition of Buddhist teachings, drawing from centuries of inquiry and meditation practices. By utilizing the Dharma teaching as a framework, we aim to promote physical, mental, and spiritual well-being, alleviating suffering and fostering qualities such as mindfulness, compassion, values, and creativity. This approach also involves reducing self-constructed narratives and conditioned patterns of the embodied mind.
3. Level three offers specialized programs tailored to the interests and preferences of clinicians, allowing them to choose an area of specialization.

In his work on contemplative practices and the training of the embodied mind, Kabat-Zinn (2003, pp. 147-149) emphasizes the significance of psychoeducation and understanding the "meaning of practice." This extends to both meditation and CCPs:

We speak of the “practice” of meditation, and the “practice” of mindfulness, meaning the actual engagement in the discipline, the inward gesture that invites and embodies it. This engagement takes a variety of forms, from a range of formal practices undertaken for varying periods of time on a regular basis, to informal practices aimed at cultivating a continuity of awareness in all activities of daily living. In fact, the term “practice” used in this way is better understood as a way of being, a way of seeing, which is embodied, inhabited, grown into through the implementation of the methods and techniques that comprise the discipline.

The preceding discussion clarifies that the significance of an instructor's personal practice in teaching mindfulness cannot be overstated. According to Kabat-Zinn, true mindfulness cannot be effectively transmitted to others unless the instructor integrates it into their own life. Mindfulness meditation is not a simple technique that can be quickly learned at a professional seminar and then shared as a quick fix for stress or tension. It is a lifelong journey that exists in both the span of a lifetime and the perpetual present moment. This paradox can only be understood and embraced through dedicated personal practice over days, weeks, months, and years (147-149). The contemplative creative practices follow the same longstanding gradual path of training.

Section 6

Suggestions for Future Research

In recent years, there has been an increasing emphasis on conducting clinical research to explore particular Buddhist practices. Over the past few decades, extensive research has been dedicated to mindfulness and compassion meditation practices, with notable contributions from experts like Jon Kabat-Zinn, Kristin Neff, and Dennis Tirch, among others. Additionally, there has been a concerted effort to integrate meditative practices derived from Buddhism into psychotherapeutic approaches.

Despite the abundance of contemplative traditions, the availability of new methods to enhance embodied mind awareness, and the emerging theories from a psychological standpoint, we are currently faced with a scarcity of tools, frameworks, and appropriate metrics to thoroughly examine and integrate these resources (Farb et al., 2015). To address this gap, future endeavours should focus on both the development of qualitative research and the refinement of quantitative measures that can objectively capture cognitive, behavioural, and physiological changes resulting from embodied mind training. This research should go beyond assessing interoceptive accuracy, encompassing attention patterns, sensitivity to interoceptive cues, the coherence between physiological and subjective changes, and regulatory strategies (Farb et al., 2015). Moreover, it is crucial to conduct randomized controlled trials to establish the optimal application of meditation and CCPs in clinical settings.

Incorporating firsthand narratives about meditation and CCPs would significantly enhance its scientific investigation, as highlighted by other researchers (Halifax, 2012; Kok, 2013). However, obtaining reliable sample data has proven to be challenging. A noteworthy recent advancement in this field involves utilizing wearable devices and cell phones to gather experience-

sampling data and offer neurofeedback to supplement meditation training (Josipovic & Baars, 2015). Nevertheless, as Brandmeyer and Delorme (2013) pointed out, these endeavours still await further scientific progress in sensor technology.

Due to limited funding, most studies on meditation and CCPs are predominantly pilot studies with few self-selected participants. These studies typically employ within-subject or cross-sectional designs and often lack adequate control groups for the placebo effect (Josipovic & Baars, 2015). However, large-scale, randomized, longitudinal studies incorporating active control groups can address some limitations (Tang et al., 2015). To fully encompass the vastness of human experiences that can arise from contemplative creative techniques, employing new scientific methodologies and adopting an integrated approach that combines the humanities and sciences may be necessary. We remain optimistic that contemplative experts trained in modern sciences, alongside an increasing number of scientists trained in meditation and CCPs, will contribute their unique perspectives and qualifications to future collaborative scientific studies on the embodied mind.

Conclusion

In conclusion, Contemplative Creative Therapy (CCT) emerges as a promising and innovative approach within psychotherapy. By integrating Buddhist philosophy, psychology, ethics, and contemplative creative practices with Western psychology and creative art therapies, CCT offers a unique and humanistic model for mental health interventions. This article has provided a comprehensive overview of CCT, emphasizing its foundations in Buddhist psychology, the contemplative sciences and the significance of the embodiment in the training of the mind. Moreover, this article advocates for further research into the neuroscientific underpinnings of

Buddhist concepts of mind and the evidence-based application of specific techniques in psychotherapeutic practice. By bridging the gap between ancient wisdom and modern science, CCT can contribute to the evidence base of effective interventions and deepen our understanding of the embodied mind. In light of these findings, it is proposed to incorporate contemplative creative therapy under the umbrella of the contemplative sciences. This integration can enhance our understanding of the human embodied mind and expand the repertoire of therapeutic modalities available to mental health professionals. As research in this field continues to unfold, it is hoped that CCT will significantly contribute to the well-being and transformative potential of individuals seeking mental health support.

References

- Abbing, A., Ponstein, A., van Hooren, S., de Sonnevile, L., Swaab, H., & Baars, E. (2018). The effectiveness of art therapy for anxiety in adults: A systematic review of randomized and non-randomized controlled trials. *PLOS ONE*, 13(12). <https://doi.org/10.1371/journal.pone.0208716>
- Addiss, S. (1989). *The Art of Zen*. Echo Point Books & Media. Brattleboro: Vermont.
- Ates, E. JM. (2017). *Contemplative Photo Therapy: Group Intervention for Youth with Anxiety Disorders*. Kindle Direct Publishing.
- Brandmeyer, T., & Delorme, A. (2013). Meditation and neurofeedback. *Frontiers in Psychology*, 4. <https://doi.org/10.3389/fpsyg.2013.00688>
- Bucciarelli, A. (2016). Art therapy: A transdisciplinary approach. *Art Therapy*, 33(3), 151–155. <https://doi.org/10.1080/07421656.2016.1199246>
- Buswell, R., & Lopez, D. (2014). *The Princeton Dictionary of Buddhism*. Princeton University Press.
- Carsley, D., Heath, N. L., & Fajnerova, S. (2015). Effectiveness of a classroom mindfulness coloring activity for test anxiety in children. *Journal of Applied School Psychology*, 31(3), 239–255. <https://doi.org/10.1080/15377903.2015.1056925>
- The Center for Contemplative Research. (2023). *What is contemplative science?* Retrieved from: <https://centerforcontemplativeresearch.org/contemplative-science/what-is-contemplative-science/>
- CMind, Center for Contemplative Mind in Society Website (2000-2015). *What are contemplative practices?* Retrieved from <http://www.contemplativemind.org/practices>

- Cohen, R. (1999). *Beyond Enlightenment: Buddhism, Religion, Modernity*. Routledge.
- Dahl, C. J., Lutz, A., & Davidson, R. J. (2015). Reconstructing and deconstructing the self: Cognitive mechanisms in meditation practice. *Trends in Cognitive Science*, 19(9), 515-523.
- Davey, H. E. (2007). *The Japanese way of the artist: three complete works on the classic tradition*. Stone Bridge Press. Berkeley: CA.
- Davis, B. J. (2015). *Mindful art therapy: A foundation for practice*. Jessica Kingsley Publishers.
- Farb, N., Daubenmier, J., Price, C. J., Gard, T., Kerr, C., Dunn, B. D., Klein, A. C., Paulus, M. P., & Mehling, W. E. (2015). Interoception, contemplative practice, and health. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00763>
- Flett, J. A., Lie, C., Riordan, B. C., Thompson, L. M., Conner, T. S., & Hayne, H. (2017). Sharpen your pencils: Preliminary evidence that adult coloring reduces depressive symptoms and anxiety. *Creativity Research Journal*, 29(4), 409–416. <https://doi.org/10.1080/10400419.2017.1376505>
- Frame, P. (2002). The value of the rejected card choice in the MARI® Card Test. *Art Therapy: Journal of the American Art Therapy Association*, 19(1), 28-31.
- Frame, P. (2006). Assessing a Couple's Relationship and Compatibility Using the MARI® Card Test and Mandala Drawings. *Art Therapy: Journal of the American Art Therapy Association*, 23(1), 23-29.
- Frith, E., Miller, S., & Loprinzi, P. D. (2019). A review of experimental research on embodied creativity: Revisiting the mind–body connection. *The Journal of Creative Behavior*, 54(4), 767–798. <https://doi.org/10.1002/jocb.406>
- Fossa, P. (2018). What is "the embodied" when we say Embodied Mind? *Mindfulness & Compassion*, 3(2), 91-108.
- Gallagher, S. (2011). Interpretations of embodied cognition. In W. Tschacher & C. Bergomi (Eds.), *The implications of embodied cognition: Cognition and communication* (pp. 59–71). Exeter, UK: Imprint Academic.
- Greeson, J. M., Toohey, M. J., & Pearce, M. J. (2015). An adapted, four-week mind–body skills group for medical students: Reducing stress, increasing mindfulness, and enhancing self-care. *EXPLORE*, 11(3), 186–192. <https://doi.org/10.1016/j.explore.2015.02.003>
- Gunaratana, H. (2002). *Mindfulness in plain english*. Wisdom Publications.
- Halifax, J. (2012). A heuristic model of enactive compassion. *Current Opinion in Supportive & Palliative Care*, 6(2), 228–235. <https://doi.org/10.1097/spc.0b013e3283530fbc>

- Hallisey, C. (1995). Roads taken and not taken in the study of Theravada Buddhism. From *"Curators of the Buddha: The study of Buddhism under colonialism."* The University of Chicago Press, Chicago: IL.
- Harvey, P. (2013). *An Introduction to Buddhism: Teachings, History and Practices*. Cambridge University Press.
- Harvey, P. (2007). Buddhist attitudes to and treatment of non-human nature. *Journal for the Study of Religion, Nature and Culture*, 35–50. <https://doi.org/10.1558/ecotheology.v3i1.35>
- Harvey, P. (1993). The Mind-body relationship in Pāli Buddhism: A philosophical investigation. *Asian Philosophy*, 3(1), 29–41. <https://doi.org/10.1080/09552369308575369>
- Hass-Cohen, N., & Findlay, J. C. (2015). *Art therapy & the neuroscience of relationships, Creativity & Resiliency: Skills and Practices*. W.W. Norton & Company.
- Hussain, D., & Bhushan, B. (2010). Psychology of meditation and health: Present status and future directions. *International Journal of Psychology & Psychological Therapy*, 10(3), 439–451.
- Hwang, K. K., Shiah, Y. J. (2019). Socialized reflexivity and self-exertion: Mandala Model of Self and its role in mental health. *Asian Journal of Social Psychology*, 22, 47–58. DOI: 10.1111/ajsp.12344
- Hwang, K. K. (2011). The mandala model of self. *NAOP, Psychological Studies*, 56, 329-334.
- Ivanovski, B., & Malhi, G. S. (2007). The psychological and neurophysiological concomitants of mindfulness forms of meditation. *Acta Neuropsychiatrica*, 19(2), 76–91. <https://doi.org/10.1111/j.1601-5215.2007.00175.x>
- Jooste, J., Kruger, A., Steyn, B. J., & Edwards, D. J. (2015). Mindfulness: A foothold for Rogers's humanistic person-centred approach. *Journal of Psychology in Africa*, 25(6), 554–559. <https://doi.org/10.1080/14330237.2015.1124619>
- Josipovic, Z., & Baars, B. J. (2015). Editorial: What can neuroscience learn from contemplative practices? *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.01731>
- Joshi, A. M., Mehta, S. A., Pande, N., Mehta, A. O., & Randhe, K. S. (2021). Effect of mindfulness-based art therapy (MBAT) on psychological distress and spiritual wellbeing in breast cancer patients undergoing chemotherapy. *Indian Journal of Palliative Care*, 27, 552–560. https://doi.org/10.25259/ijpc_133_21
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice Journal*, (10)2, 144-156. DOI: 10.1093/clipsy/bpg016 <https://institutpsychoneuro.com/wp-content/uploads/2015/09/Kabat-Zinn-2003.pdf>

- Kao, H. SR., Zhu, L., Chao, A. A., Chen, H. Y., Liu, I. C., Zhang, M. (2014). Calligraphy and meditation for stress reduction: an experimental comparison. *Dove Medical Press*, Volume 2014:7 Pages 47—52.
- Kao, H. (2010). Calligraphy therapy: A complementary approach to psychotherapy. *Asia Pacific Journal of Counselling and Psychotherapy*, 1:1, 55-66, DOI:10.1080/21507680903570334
- Kato, H. (2016). The relationship between the psychology of religion and Buddhist psychology. *Japanese Psychological Research*, 58, 70–84. <https://doi.org/10.1111/jpr.12121>
- Kelly, B. (2008). Buddhist psychology, psychotherapy and the brain: A critical introduction. *Transcultural Psychiatry*, 45(1). <https://doi.org/10.1177/1363461507087996>
- Kemper, K. J., & Khirallah, M. (2015). Acute effects of online mind–body skills training on resilience, mindfulness, and empathy. *Journal of Evidence-Based Complementary & Alternative Medicine*, 20(4), 247–253. <https://doi.org/10.1177/2156587215575816>
- Khademi, F., Rassouli, M., Rafiei, F., Moayedi, S., Torres, M., Marzban, N., Haji, E., & Golitaleb, M. (2021). The effect of mandala colouring on anxiety in hospitalized COVID-19 patients: A randomized controlled clinical trial. *International Journal of Mental Health Nursing*, 30(S1), 1437–1444. <https://doi.org/10.1111/inm.12901>
- Khoury, B., Knäuper, B., Pagnini, F., Trent, N., Chiesa, A., & Carrière, K. (2017). Embodied mindfulness. *Mindfulness*, 8(5), 1160–1171. <https://doi.org/10.1007/s12671-017-0700-7>
- Kok, B. E. (2013). “The science of subjective experience: positive emotions and social closeness influence autonomic functioning,” in *Compassion: Bridging Practice and Science*, eds T. Singer and M. Bolz (Munich: Max Planck Society).
- Lhadrepa, K., Davis, C. (2017). *The art of awakening: A user’s guide to Tibetan Buddhist art and practice*. Snow Lion, Shambhala Publications. Boulder: Colorado.
- Loizzo, J. (2017). *Advances in contemplative psychotherapy: Accelerating healing and transformation*. Taylor and Francis.
- Loizzo, J. (2023). *Embodied Brain - Yoga, Neuroplasticity, and the New Scientific Paradigm* [Conference Presentation]
- Lopez, D. S. (2017). *Hyecho's Journey: The World of Buddhism*. The University of Chicago Press, Chicago: IL.
- McMahan, D. L. (2012). *Buddhism in the modern world*. Religions in the Modern World, Routledge. New York: NY.
- McMahan, D. L. (2008). *The making of Buddhist modernism*. Oxford University Press, Inc. New York: NY.

- Michalak, J., Burg, J., & Heidenreich, T. (2012). Don't forget your body: Mindfulness, embodiment, and the treatment of depression. *Mindfulness*, 3(3), 190–199.
<https://doi.org/10.1007/s12671-012-0107-4>
- Mind and Life Institute Website (2020). *About Mind and Life*. Retrieved from <https://www.mindandlife.org/about/#mission>
- Monier-Williams, S., Leumann, E., & Capeller, C. (2007). *A Sanskrit-English Dictionary*. Nataraj Books.
- Patry Leidy, D. (2008). *The Art of Buddhism: An Introduction to its History and Meaning*. Shambala Publications. Boston: MA.
- Peterson, C. (2014). Mindfulness-based art therapy: Application for healing with cancer. In Rappaport, L. (Ed.), *Mindfulness and the arts therapies: Theory and practice*, pp.64-80. London, UK: Jessica Kingsley.
- Rappaport, L. (2014). *Mindfulness and the arts therapies: Theory and practice*. Jessica Kingsley Publishers.
- Rhys Davids, C. A. (1928). *Sakya or Buddhist Origins*.
- Runco, M. A. (2007). *Creativity: Theories and themes: Research, development, and practice*. Elsevier Academic Press.
- Saitzyk, S. (2013). *Place Your Thoughts Here: Meditation for the Creative Mind*. First Thought Press.
- Sawyer, R. K. (2017). Teaching and learning how to create in schools of art and design. *Journal of the Learning Sciences*, 27(1), 137–181. <https://doi.org/10.1080/10508406.2017.1381963>
- Schmalzl, L., Crane-Godreau, M. A., & Payne, P. (2014). Movement-based embodied contemplative practices: Definitions and paradigms. *Frontiers in Human Neuroscience*, 8. <https://doi.org/10.3389/fnhum.2014.00205>
- Scott, G., Leritz, L. E., & Mumford, M. D. (2004). The effectiveness of creativity training: A quantitative review. *Creativity Research Journal*, 16(4), 361–388.
<https://doi.org/10.1080/10400410409534549>
- Shambhala International Website (1994-2007). *Contemplative Arts*. Retrieved from <http://dorjedenmaling.org/meditation/contemplative-arts/>
- Shambhala International (1994-2023). Contemplative arts. Retrieved from: [Contemplative Arts | Culture and Art in Everyday Life | Shambhala](#) - section on Miksang and Shambhala Art.
- Siderits, M. (2019). Buddha. *The Stanford Encyclopedia of Philosophy*.

Study Buddhism by Berzin Archives (2003-2023). Meditations for Recognizing the Five Aggregates, by Dr. Alexander Berzin. Retrieved from: [Meditations for Recognizing the Five Aggregates — Study Buddhism](#)

Tang, Y.-Y., Holzel, B., & Posner, M. (2015). The Neuroscience of Mindfulness Meditation. *Nature Reviews Neuroscience*, 16, 213–225.
<https://doi.org/https://doi.org/10.1038/nrn3916>

Tirch, D., Silberstein, L. R., Kolts, R. L. (2017). *Buddhist psychology and Cognitive-Behavioural Therapy: A clinician's guide*. The Guilford Press, New York: NY.

Thich Nhat Hanh (1998). *Zen Keys: A Guide to Zen Practice*. Bantam Doubleday Dell Publishing Group.

Thurman, R. (1994). *The Tibetan book of the dead: The great book of natural liberation through understanding in the between*. Bantam Book.

Thurman, R. (2021). *Wisdom is bliss: Four friendly fun facts that can change your life*. Hay House, Inc. www.hayhouse.com.

Trungpa, C. (1975). *Visual Dharma: The Buddhist Art of Tibet*. Shambhala Publications, Berkeley: CA.

Trungpa, C. (2007). *The teacup and the skullcup: Where Zen and Tantra meet*. Boston, MA: Shambhala.

van der Schyff, D., Schiavio, A., Walton, A., Velardo, V., & Chemero, A. (2018). Musical creativity and the embodied mind: Exploring the possibilities of 4E cognition and dynamical systems theory. *Music & Science*, 1, 205920431879231.
<https://doi.org/10.1177/2059204318792319>

Ward, T. B., & Kolomyts, Y. (2010). Cognition and creativity. In J. C. Kaufman & R. J. Sternberg (Eds.), *The Cambridge handbook of creativity* (pp. 93–112). Cambridge University Press. <https://doi.org/10.1017/CBO9780511763205.008>

Ward, T.B., & Saunders, K. N. (2003). Creativity. In *Encyclopedia of Cognitive Science*, L. Nadel (Eds), (pp 862–869). London, UK: Nature Publishing Group.

Wikimedia Foundation. (2023, April 17). *Buddhist ethics*. Wikipedia.
https://en.wikipedia.org/wiki/Buddhist_ethics

Wikimedia Foundation. (2023, April 17). *Buddhist ethics*. Wikipedia.
https://en.wikipedia.org/wiki/Buddhist_ethics

Wikipedia (N/A). *The Buddha*. Wikipedia. [The Buddha - Wikipedia](#)