2019

A Phenomenological Exploration of Mindfulness Meditation and the Creative Experience

Sheryl Christian Morrissey
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Sheryl Christian Morrissey

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Elisabeth Weinbaum, Committee Chairperson, Psychology Faculty
Dr. Peggy Samples, Committee Member, Psychology Faculty
Dr. Alethea Baker, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2019

Abstract

A Phenomenological Exploration of Mindfulness Meditation and the Creative Experience

by

Sheryl Christian Morrissey

BS, Arkansas State University, 1998

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology

Walden University

February 2019

Abstract

Creating is the highest level of intellectual functioning in the cognitive domain. As standardized testing has increased, U.S. K-12 education has shown a decline in creativity for students. Mindfulness meditation (MM) increases creativity and could serve as a solution to this dilemma. This study's purpose was to enrich findings regarding MM's role in enhanced creativity by conducting an exploration regarding lived experiences of creating for individuals who practice MM. A gap in the literature exploring the topics of MM and creativity together using qualitative methods was identified; therefore, research understanding lived experiences of creating within the experiential context of MM was necessary. The main research question, followed by 3 closely related questions, examined the subjective meaning of the experience of creating for MM practitioners. To provide lived experiences regarding creating, 3 participants colored in a mandala and were interviewed. Descriptive transcendental phenomenology was used to explore the act of creating from the perspectives of these 3 individuals. Participants' described experiences supported Sternberg's theory that creativity developed as a habit and suggested that MM actuated Csikszentmihályi's creative flow. Positive societal implications of bringing MM into U.S. K-12 schools as a conduit for creativity cannot be overrated. MM offers an integrated modality to increased creativity, communication, collaboration, and critical thinking, or the 4 Cs. Future studies regarding MM and creativity's relationship are recommended to further enrich current literature and address the existing gap.

A Phenomenological Exploration of Mindfulness Meditation and the Creative Experience

by

Sheryl Christian Morrissey

BS, Arkansas State University, 1998

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology

Walden University

February 2019

Dedication

To Mom for your unconditional love, unwavering support, and trust in my capability to achieve my dreams. I love you.

Acknowledgments

I extend my heartfelt gratitude and appreciation to Diane D'Angelo and Kathi Villano whose kind friendship, assistance and support made the completion of the study and finishing this dissertation possible, and to my brother, Robert Christian, for his intellect, inspiration, and for always believing in me. I am deeply grateful to my research team: the participants whose essential contributions made the study achievable, Dr. Weinbaum for her perseverance, enthusiastic direction and valuable expertise, and Dr. Samples for her encouragement, expertise and guidance, which greatly helped me on my doctoral journey.

Table of Contents

List of Figures

.

Chapter 1: Introduction to the Study

Introduction

Mindfulness meditation (MM) augments creativity in many diverse ways (Carson, 2014; Colzato, Ozturk, & Hommel, 2012; Ding, Tang, Tang, & Posner, 2014; Langer, 2006). According to Runco (2014), creativity was widely researched and the concepts and theoretical models of Graham Wallas, Carl Jung, and Carl Rogers were furthered by Mihály Csikszentmihályi and Robert Sternberg. According to Hart, Ivtzan, and Hart (2013), MM research and applied MM interventions by Jon Kabat-Zinn and Ellen Langer led MM from origins in Zen Buddhism, to use in health and education. With creating considered as the highest intellectual level of cognitive functioning (Rich, Colon, Mines, & Jivers, 2014; Svinicki & McKeachie, 2011), gaining a deeper understanding regarding experiences of creating within the context of MM practice was undertaken in this study.

Horan (2009) viewed creativity and MM as inextricably linked through neuropsychological connections, and Langer (2006) used the words creative and mindful as synonyms in her MM research. Investigations of the hypothesis that MM can enhance creativity had shown MM to increase creative thinking, focus (Colzato et al., 2012), output and potential (Langer, 2006). While both creative experiences and MM were explored qualitatively, there appears to be little to no qualitative research on these topics together. The study aimed to provide an in-depth inquiry into creativity and MM's interconnection through interviews and observations pertaining to lived experiences of creating from the perspectives of individuals who practice MM.

In regard to individuals who practice MM, it is likely that these individuals learned to notice their breathing, be aware of their body and thoughts in the present moment, suspend judgment, still the mind, see things with curiousness, realize a calm sense of inner wisdom, and have kindness and compassion toward themselves and others (Lenze et al., 2014). I inquired into the subjective and unique perspectives regarding lived experiences of creating for individuals who are MM practitioners. The insights of these individuals, who had a heightened sense of self-awareness, assisted in enriching existing research on creative experience and MM's role toward its enhancement. The background, nature of the study, theoretical framework, research questions, assumptions and limitations, and the significance of the study are presented in this chapter.

Background

Practicing MM promoted a sense of well-being, psychological balance, self-regulation, advanced critical thinking, self-fulfillment, self-awareness, openness, curiousity, integrative thinking, solution focused abilities, and advanced intellect (Horan, 2009; Langer, 2014; Nilsson, 2014), which were the same attributes associated with being creative (Csikszentmihályi, 1997; Eysenck, 1995; Horan, 2009; Primi, 2014; Sternberg, 2012).

Ball (1980) said that individuals who practiced long-term transcendental meditation (TM) showed high scores of verbal and figural creativity and auditory creativity. In a theoretical investigation that sought an explanation for the hypothesis that MM served as an enhancer for creativity, Horan (2009) examined at least 92

electroencephalogram (EEG) studies containing EEG evidence from creativity and meditation research. According to Horan, EEG provided spatial resolution of cortical electrical activity or brain waves in the central nervous system. Horan (2009) said that brain waves were the same for individuals while they were practicing MM and while they were actively creating. Lebuda, Zabelina, and Karwowski (2015) analyzed 20 investigations that directly addressed MM's influence on creativity from 1977-2015. Lebuda et al. suggested that creativity was dependent on MM.

Problem Statement

Creating was regarded as the highest level of intellectual functioning in the cognitive domain of Bloom's taxonomy (Rich et al., 2014). However, Sternberg (2012) said that common U.S. educational practices, such as standardized testing, discouraged and inhibited the development of creativity in children. Furthermore, pressures to conform to rules, such as early start times with penalties for tardiness, left children to begin their school days stressed instead of able to access their creative potentials.

Even in its briefest form, MM was shown to have enhanced creative performance (Langer, 2006), and MM effectively reduced stress for elementary school children (Black & Fernando, 2014; Klco, 2010), middle school children (Viafora, Mathiesen, & Unsworth, 2014), and individuals with schizophrenia (Brown, Davis, LaRocco, & Strasburger, 2010). MM was implemented in higher education to reduce stress for faculty and students (Zajonc, 2013), and the U.S. military used MM to improve focusing abilities and reduce stress and anxiety for soldiers and their families (Brayboy, 2014; Purser,

2014). According to LaRock (2014), there was a push to fully integrate MM into U.S. primary and secondary education to assist in addressing the decline in the emotional, social, and academic wellbeing of American youth through programs such as the Mind, Body, Awareness Project, the Association of Mindfulness in Education, Mindful Life, the Hawn Foundation, and Mindful Schools.

Purpose

The purpose of this descriptive, transcendental phenomenological study was to enrich findings regarding MM's role in enhancing individuals' creativity by conducting an exploration into lived experiences regarding creating for individuals who practice MM. Descriptions and ascribed meanings pertaining to creative experiences were obtained through interviewing three MM practitioners. Interview data were transformed into meaning units that shaped and textured thematic details into structures.

MM has been shown to increase creativity for individuals (Carson, 2014; Colzato, Ozturk, & Hommel, 2012; Ding, Tang, Tang, & Posner, 2014; Langer, 2006); however, little to no qualitative inquiry has explored creative experiences and MM together. A gap in the literature in exploring lived experiences of creating in the context of practicing MM exists. Therefore, a qualitative approach was needed to learn about the nature of creative experiences from the perspectives of individuals who practice MM to enrich findings regarding MM's role in creative enhancement.

Nature of the Study

The researcher's worldview, philosophical lens, beliefs, and experiences shaped the interpretive framework of the study in qualitative inquiry (Creswell, 2013). For this qualitative study, I chose descriptive, transcendental phenomenology for the research design. According to Giorgi (2009), phenomenology was an appropriate method to qualitatively interpret and understand ascribed meanings of lived experiences, and its applied implementations were identical to those of mindfulness, whereby the researcher became open to conscious awareness, suspended judgment, and was in the present moment to be most effective. Giorgi (2009) referred to achieving a mindful state of awareness as assuming a transcendental phenomenological attitude, which opened the researcher up to imaginative freedom (i.e., creativity). With the intuitive nature of phenomenological interpretation, the researcher and participants were co-creators (Giorgi, 2009).

The population I chose to study were adult MM practitioners in the U.S. It was likely that these MM practitioners learned how to enter a mindful state of consciousness through guided meditations and instructions. MM instructions were described as attending to present moment awareness through noticing breathing, heartbeat, body, and thoughts without judgment, with openness, curiousity, and loving kindness (Kabat-Zinn, 1994; Lenze et al., 2014). They probably learned how to still their minds, be centered, focused, grounded, and viewed things as if they were seeing them for the first time (Kabat-Zinn, 2003: Langer, 2014). Furthermore, it was likely that these MM practitioners

were aware of emotions and thoughts that entered their consciousness, and they observed rather than personalized or attached emotions to their thoughts by attending to the present moment (Kabat-Zinn, 1994). While practicing MM, individuals were likely to realize joy, calmness, compassion, and wisdom, which left them with an overall sense of wellbeing and self-awareness (Lenze et al., 2014).

For the study, I selected participants that were regularly consistent and/or daily practitioners of MM. Because the participants in this study had varying degrees of experience with the act of creating, they were provided with a task that was enjoyable but did not require artistic expertise. For this task, I had participants color in a mandala. A mandala is a symbolic geometric pattern representing the universe or kosmos that is usually circular in shape (van der Vennet & Serice, 2012). Green and Young (2015) considered coloring in a mandala an example of a creative experience, and coloring geometric patterns and mandalas were shown to relieve anxiety more than coloring a blank piece of paper (Curry & Kasser, 2005).

Research Questions

For the study, I used the method of descriptive, transcendental phenomenology to explore the act of creating from the perspective of individuals who practiced MM. There was one main question followed by three closely related questions that added depth to the inquiry. The research questions were:

RQ1: What is the subjective meaning of the experience of creating for MM practitioners?

RQ2: What is the experience of creating like for individuals who practice MM?

RQ3: How do MM practitioners feel about the experience?

RQ4: Is there anything reminiscent about the experience of creating for these individuals? Did the experience feel similar to or remind them of anything?

Theoretical Framework

The theoretical or conceptual framework was the underlying lens through which a topic was investigated and explored (Creswell, 2009; 2013; Reynolds, 2010). Thus, the theoretical framework was considered a basis of the model and design. The theoretical or conceptual framework simultaneously drove the research problem, research question(s), hypothesis, and method selection for the study (Creswell, 2009; 2013; Frankfort-Nachmias & Nachmias, 2008; Reynolds, 2010).

There were two theoretical frameworks underlying the study: creativity and mindfulness. The study's purpose looked towards MM's role in enhancing creativity and their relationship. Therefore, concepts and theoretical models of creativity and mindfulness were combined to offer insights pertaining to their conceptual integration.

Creativity

Freud (1994) believed that creativity was what allowed individuals to relieve their selves of the suffering of life while Jung (2001) viewed creativity as an essential part of human existence. Based on the healing relationship of creativity toward the psyche, Jung (2001) said that mental health depended on creativity to obtain and maintain a sense of well-being. The creating of mandalas, which were used therapeutically by Jung, were

found to reduce anxiety (Curry & Kasser, 2005; Henderson, Rosen, & Mascaro, 2007; van der Vennet & Serice, 2012).

According to Rogers (1954), creative development was influenced by external and internal environments. Internal conditions that led to creativity's development were openness to new experiences, being able to evaluate and regulate the self, and curiousity. Csikszentmihályi (1997), who developed creative flow theory, was aligned with creative development being affected by internal and external environments. Csikszentmihályi's flow was described as an intense, focused, and pleasurable engagement while actively creating.

Horan (2009) described creativity's psychological foundation as "the decision to create, an attitude of creativity, and the desire to be unique," (p. 214). Sternberg (2012) said that for creative individuals, being creative was the result of an attitude toward life rather than an inborn trait. Sternberg (2012) likened the development of creativity to repeatedly thinking in novel ways whereby being creative became a habit. Another way of looking at it is that neural pathways generated by repeated patterns of novel thought affected individuals becoming creative through neuroplasticity, which is the brain's ability to organize and form new neural connections (Horan, 2009). According to Horan (2009), creatives, or highly creative individuals, and individuals actively creating had an increased low-alpha activity that involved decreased frontal lobe activity.

Wallas (2014) said that there were four stages in the creative process; preparation, incubation, illumination, and verification. The incubation stage was unconscious,

happened during sleep, and was considered by Wallas to be when actual creative processing really took place. Wilber (2000) created integral theory, which integrated all philosophies and schools of thought into one theoretical framework as a theory of everything. Wilber viewed individual creativity as being a connection to the creator consciousness of all that is or kosmos. Wilber (2000) said that by aligning with or opening up to the kosmic dimension or source of all creation, individuals could energetically draw from the infinite well spring of creative consciousness.

Mindfulness

According to Hart et al. (2013), the two main researchers of mindfulness that dominated the literature since the 1980s were Langer and Kabat-Zinn. Hart et al. said that their research ran parallel with many convergent areas; however, there was no formal merging of their work. Langer's mindfulness had been termed as creative while Kabat-Zinn's had been called meditative (Hart et al., 2013).

Langer (2014) described MM as an active and effortful heightened state of conscious awareness. With Langer crediting its origins to Buddhism, meditative mindfulness was moment-to-moment awareness without judgment, and socio-cognitive or state mindfulness was attentively noticing objects of awareness as emergent and novel. However, in both meditative and socio-cognitive mindfulness, all thoughts and judgements based on past experiences were dissolved through attending to present moment awareness and seeing things as new (Langer, 2014). Langer's interventions were brief instructions given to individuals that induced a state of mindfulness. These brief

MM interventions were shown to increase individuals' cognitive and creative performance, and they increased a sense of wellbeing (Langer, 2006). Langer (2006) believed "our natural, mindful creativity should be the way we experience most, if not all, of our days," (p. 228).

Kabat-Zinn (1994) defined mindfulness as purposefully paying attention in a certain fashion, without judgment, and in the present moment. Kabat-Zinn (1994) stated, "The best way to capture moments is to pay attention. This is how we cultivate mindfulness. Mindfulness means being awake. It means knowing what you are doing," (p. 36). Kabat-Zinn (2003) said that MM practices were launching platforms that cultivated and sustained attention. He referred to practicing MM as the menu, meaning that there were several ways to practice like there were many things to order for a meal. Purposeful regulation of consciousness through moment-to-moment attention, or a mindful state of awareness, was the meal, meaning that the result of a chosen MM practice was a mindful state like the chosen order from the menu resulted in a meal (Kabat-Zinn, 2003).

Kabat-Zinn (1994) said that MM training developed the ability for individuals to sustain long periods of mindfulness every day. Primarily drawn from the Buddhist religious practices of meditation, Kabat-Zinn's mindfulness based interventions were therapeutic in nature, and a mindful disposition was sought. The lessening of anxiety, and the lessening of physical and emotional pain were the goals (Kabat-Zinn, 1994).

Mindfulness-based stress reduction (MBSR) was developed by Kabat-Zinn in 1979 as a therapeutic form of MM (Hart et al., 2013).

Kabat-Zinn (2003) used MM interventions that were detailed, multifaceted, required daily practice over a period time, and their intention was therapeutic. Langer (2014) used MM inductions that were brief instructions, did not require lengthy or consistent practice, and were oriented towards educational research. The core mechanism beneath Langer's and Kabat Zinn's MM interventions was self-regulation of attention, and they considered mindfulness as both a cognitive mode and a meditative practice (Hart et al., 2013).

Integration

The topics of creativity and mindfulness were explored together as a conceptual integration of their theoretical frameworks. Through an integral lens, MM was described as an all-encompassing (Demick, 2000), effortful and attentive moment-to-moment cognitive state (Kabat-Zinn, 1994; Langer, 1989), as well as a gateway to transcendent, heightened, and open awareness (Horan, 2009). Wallas (2014) and Jung (2001) said that creating opened connections to consciousness, and Wilber (2000) said that that creative energy was one and the same with the consciousness of the kosmos, the creator, or all that is.

Langer (2006) considered creativity a central construct of MM and interchanged the terms creative and mindful. Csikszentmihályi (1997) defined flow as an intensely focused and attentive state attained when creating, which was similar to the heightened

state of consciousness achieved through MM that Kabat-Zinn (1994) described. Jung (2001) viewed creativity as promoting healing and wellbeing through focused awareness and heightened consciousness, which described a mindful state of awareness.

Sternberg (2012) viewed creativity as developing, typically in childhood, through repeatedly thinking in novel ways that became a habit to create. Muraven and Baumeister (2000) said that the self-regulation of attention attained through consistent MM practice was likened to using a muscle repeatedly so that it strengthened and was committed to muscle memory. Horan (2009) said that the focused attentional patterns found in MM altered the cortical maps of the brain through neuroplasticity as the brain organized and formed new neural connections. Sabaawi (2004) stated that the role of MM was to actively focus on a particular stream of consciousness, and that attentional focus was the mechanism that shaped the brain through neuroplasticity. According to Horan (2009), MM induced a "state of low cortical arousal (e. g., increased low-alpha)" (p. 211) that promoted creative thinking, open awareness, focus, and increased cognitive performance and flexibility.

In EEG studies, the increased brain waves of individuals practicing MM were virtually identical to the increased brain waves of individuals actively creating and performing creative tasks; however, neuropsychological links between MM and creativity were correlational and inferred neither cause nor effect (Horan, 2009). Horan (2009) suggested that MM worked as a neural primer for creativity as an explanation for the hypothesis that MM enhanced creativity. Lebuda et al. (2015) said that overall, MM

practice was positively correlated with creativity levels and increased creative performance in an analysis of 20 studies that directly investigated MM's relationship to creativity. According to Carson (2014), practicing MM in both the more eastern tradition of Kabat-Zinn and the more western tradition of Langer, "can enhance natural creative abilities through neural, cognitive, emotional, and social mechanisms," (p. 344).

Definition of Terms

Bloom's Taxonomy of Educational Objectives: is a hierarchical ranking of intellectual levels that are important in learning. (Overbaugh, R. C. & Schultz, L. (n.d.); Rich et al., 2014).

Body Scan: A form of MM used in MBSR training that focuses on the body in the present moment (Lenze et al., 2014).

Csikszentmihályi's Flow: Flow is an intensely focused, rewarding, and heightened state of consciousness typically achieved while in the process of creating (Csikszentmihályi, 1997).

Creatives: Highly creative individuals (Horan, 2009).

Electroencephalogram (EEG): Provides spatial resolution of cortical and subcortical electrical activity or brain wave activity often used to effectively monitor the central nervous system for diagnostic purposes (Horan, 2009).

Epoché: The suspension of judgment or bias based on past experience used in phenomenology (Giorgi, 2009).

Focused Attention (FA) Meditation: MM technique with a focused (strong) top down control bias; FA uses a focal point whereby attention is drawn to only one thing such as an image, object, sound, sensation, or the breath (Colzato et al., 2012).

Integrative Body-Mind Training (IBMT): A form of MM that focuses on the body in the present moment (Ding et al., 2014).

Kosmos: "An old Pythagorean term, which means the entire universe in all its many dimensions: physical, emotional, mental and spiritual. Kosmos includes the physiosphere or cosmos, the biosphere or life, and the noosphere or mind," (Kornman, 1996, p. 1).

Mandala: Originated as a spiritual/ritualistic symbol in Indian religions, mandala is a metaphysical term commonly used for any geometric pattern that is a symbolic representation for the cosmos or universe, and in Sanskrit, its literal meaning is circle (van der Vennet & Serice, 2012).

Mindfulness Based Stress Reduction (MBSR): A therapeutic form of MM developed by Kabat-Zinn in 1979 (Hart et al., 2013).

Mindfulness Meditation (MM): An active and effortful heightened state of conscious awareness, and an open, attentive moment-to-moment awareness while seeing things as novel and without judgement (Kabat-Zinn, 1994; Langer, 1989).

Neuroplasticity: The ability of the brain to organize and form new neural connections (Horan, 2009).

Open Monitoring (OM) Meditation: MM technique with a broad (weak) top down control bias; OM is attentively noticing and allows present moment awareness of thoughts, feelings, bodily sensations, and external distractions without establishing any attachment or judgement towards them (Colzato et al., 2012).

Transcendental Meditation (TM): TM is an attentional meditation practice that uses a mantra and is typically practiced twice daily (Horan, 2009).

Assumptions

There were several general assumptions in this study: The first assumption was that lived experiences of participants could be conveyed verbally and be correctly interpreted, reduced, transformed into meaningful units, and shaped into a structure of the experience. The next assumption was that the three participants were truthful in their responses to the interview questions. Participation was voluntary, meaning that details were described and shared willingly, and the assumptions were that interview questions were answered openly and honestly so that the results were meaningful.

It was assumed that coloring in a pre-outlined mandala provided participants with a creative experience. Due to the complexity of the mandala chosen for this exercise, completely coloring it in with various shades of markers could take more than an hour. Participants were directed to take their time and work on the task for as long as they wished to.completion was not a requirement.

As an author, illustrator, and artist, I have experienced Csikszentmihályi's flow, which could lead to an expectation or bias that participants would experience flow. As a

practitioner of MM, I have a bias, which has influenced my belief that MM enhances the act and experience of creating. I also have a bias in my belief that MM heightens awareness regarding my intuitive and interpretive skills in data collection and analysis. Practicing MM consistently was a criterion for this study. As the three participants said that they practiced MM consistently, it was assumed that they were being truthful and could therefore be considered MM practitioners.

These assumptions were concerned with the analysis and interpretation of data and the nature of the findings. It was assumed that developing rapport and using well designed, open ended questions and active listening during the interview process was an appropriate format for obtaining descriptive information related to participants' lived experiences. Each interview was audio recorded with participants' full permission to allow for accurate transcription. Furthermore, it was assumed that the descriptive, transcendental phenomenological method used with the data collected achieved an accurate interpretation and synthesis of participants' words, which were transformed into lived meanings or meaning units, structures and emergent themes. A descriptive, transcendental phenomenological approach was assumed to be the best method to obtain, analyze, and interpret data regarding lived experiences of creating for individuals who practice MM.

Scope of Study and Delimitations

Phenomenology requires that all participants had the same lived experiences relative to the phenomenon being studied (Creswell, 2013). The study was set to involve

a group of no more than seven voluntary participants that were MM practitioners. According to Creswell (2013), a purposeful sample consists of data collected from three to ten information rich participants to ensure an in-depth account of the phenomenon. Although a sample of three to ten may seem small, deeply examining each selected participant's unique experiences rather than superficially investigating a larger participant sample was recommended to gain a deeper understanding of the phenomenon. The study looked to discover and understand the meanings that three MM practitioners ascribed to their lived experiences regarding creating.

Limitations

Unexpected or expected factors that can potentially weaken a study (i.e., potential threats to generalizability) are referred to as limitations (Creswell, 2013). Limitations also offer direction for future studies. A limitation for this study was inherent to the nature of qualitative inquiry and more specifically, phenomenological exploration as phenomenology typically seeks understanding of a phenomenon through narrow criteria rather than looking for broad generalizability. As criteria was specific, findings may not be transferable to the general population being studied. The findings of this study were limited to the three participants' reflections on what meaning experiences of creating had for them. The small number of participants, their unique nature, their length of MM experience, education level, gender, number of creative experiences, geographic location, and ethnicity or cultural background might potentially threaten transferability to the general population of MM practitioners. Furthermore, practitioners of MM who

volunteered to participate were potentially not a representative sample of MM practitioners as a whole. However, as every participant was a unique individual, every interview response had the potential to offer valuable and meaningful information about lived experiences of creating from the perspectives of these three MM practitioners.

Significance

Practical Contributions and Importance to Education

From an educational standpoint, creating has been considered to be at the very top level of intellectual functioning in the cognitive domain of Bloom's taxonomy (Rich et al., 2014; Svinicki & McKeachie, 2011). Exploring experiences regarding creating in the context of MM practice can further support MM's contribution in enhancing creative performance and increasing creative potential.

Implications for Social Change

This study further supports and enriches the current mindfulness in schools movement started by MM proponents Kabat-Zinn and Langer to bring MM into schools, thus further enlisting MM as an educational tool to reduce stress, promote focus, and enhance creativity for students and their teachers. Understanding creativity in this context offered support to the existing psychological and educational research that is taking MM practice to this next step, which is using it as a practical application in public and private primary schools, secondary schools, and higher education worldwide. For example, through brief and guided meditation at the beginning of class, students are instructed to sit quietly and to take notice of their breathing, thus centering, calming, and focusing

students' attention to the present moment, and opening them to their wellsprings of unique creative potentials.

Summary

I phenomenologically explored how MM practitioners subjectively viewed, felt about, and assigned meanings to their lived experiences of creating. The study's findings provided insights supporting, interpreting and enriching MM's role in creative enhancement. Findings also provided insights towards mindfulness and creating as interchangeable constructs and that practicing MM and actively creating were neuropsychologically identical. The study served to enrich and support that MM and creating were directed by the same psychological mechanism of self-regulated attention integral to transcendent present moment awareness and heightened consciousness. In chapter 2, I will present the literature review.

Chapter 2: Literature Review

Purpose Statement

The purpose of the study was to enrich findings regarding MM's role in increased creativity by conducting a phenomenological exploration into ascribed meanings of lived experiences of creating for individuals who practice MM. Three individuals who practiced MM participated in a task that involved detailing a mandala, and then they were interviewed one to two days later to explain their experiences. Provided within chapter 2 was an overview of literature pertaining to the theoretical frameworks of creativity and mindfulness that were integrated throughout the study. The background, research and perspectives integrating MM with creativity, and MM's role in increased creativity were discussed in terms of social implications, trends and significance.

Search Strategies

Research resources are located in many places such as scholarly journals, books, dissertations, periodicals, and government documents (Creswell, 2009). Journal articles were identified by searching databases EBSCOhost, EBSCO, ProQuest, PsycINFO, Google, Google Scholar, PsycARTICLES, Educational Resource Information Center (ERIC), and Data. gov. Many articles found in references sections of key articles and books were obtained by searching Google Scholar. I also found articles on the Mindful Schools and the UCSD mindfulness websites. Search terms included: *creativity and mindfulness meditation, Jung and creativity, creativity and theory, creativity and intelligence, creativity and education, Csikszentmihályi and creativity, Sternberg and*

creativity, Wilber and creativity, Wallas and creativity, creative experience, creating and experience, adult and coloring, phenomenology and creativity, phenomenology and mindfulness meditation, phenomenology and creativity and mindfulness meditation, creativity and mindfulness meditation and education, mindfulness and theory, flow theory, education and mindfulness meditation, Kabat Zinn and mindfulness meditation, Langer and mindfulness and creativity, mandala, mandala and mindfulness meditation, mandala and creativity, mandala and coloring, mindfulness and schools, lived experience and mindfulness meditation, creative experience, descriptive phenomenology and creativity, descriptive phenomenology and mindfulness, creative experience and mindfulness meditation.

Theoretical Framework

The theoretical frameworks of creativity and mindfulness underlie the study. Models, concepts, and theories of creativity were presented and synthesized, and mindfulness models and concepts were presented and discussed. As the study's purpose was to gain enrichment regarding MM's role in enhanced creativity and their interconnection, the topics of creativity and mindfulness were merged to offer insight pertaining to their conceptual integration.

Overview of Creativity, Mindfulness, and their Relationship

Creativity

The field of psychology has shown great interest in creativity (Runco, 2014). Hoffman and Calvert (2007) said that while many of Freud's ideas appeared outdated, such as the idea that creativity was a meaningless response to alleviate human suffering, Jung's view that creativity was integral to mental health has remained consistent with contemporary creativity theories, which are more humanistic than nihilistic.

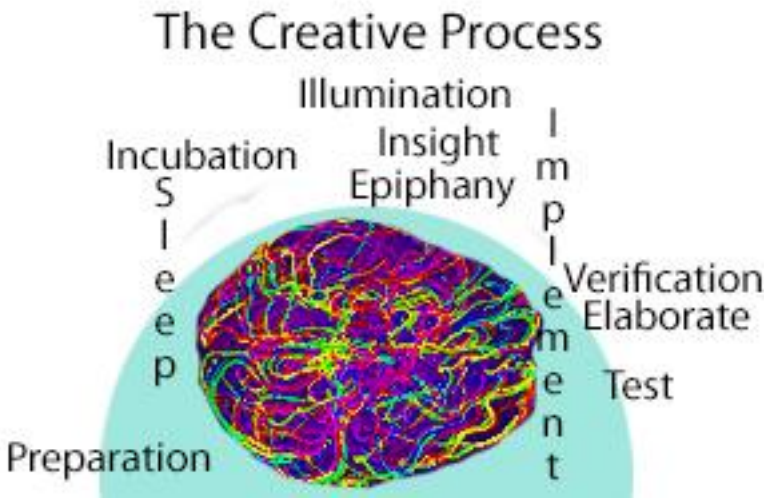


Figure 1. Visual representation Wallas (2014) four phases of creative processing.

Wallas' four phase model formalized the stages of creative processing (Gallate, Wong, Ellwood, Roring, & Snyder, 2012). Wallas (2014) defined the stages of his four phase model of the creative process as preparation, incubation, insight or illumination, and verification.

- In the preparation phase, the problem, idea, opportunity, or project is identified, isolated, organized, and focused on.
- During incubation, the problem, idea, opportunity, or project is pushed outside of conscious awareness by sleeping on it.
- In the illumination phase, an insight, revelation, or solution enters into consciousness. Illumination is often described as a revelation or an epiphany that was spontaneous or happened unexpectedly.
- The verification phase is when the insight or solution is applied and refined or tested.

Wallas (2014) believed that the second phase, incubation, which was an unconscious or nonconscious process that took place during sleep, was when actual creativity occurred. Gallate et al. (2012) investigated the incubation phase, supported it as an unconscious process, and showed that creatives are better at using nonconscious, incubatory processes than less creative individuals. According to Gallate et al. (2012), creatives should be provided with an objective well ahead of its deadline to allow them the freedom and flexibility to create or generate insights.

Bloom's taxonomy of educational objectives ranked creating at the highest intellectual level of the cognitive domain (Rich et al. 2014), and creativity has been closely associated with genius (Eysenck, 1995). When investigating the relationship of creativity to high IQ scores in children ages 9-11, Kershner and Ledger (1985) found that both high IQ and non-high IQ children with high levels of creativity were better at

storytelling, found it easier to understand and solve hypothetical problems, and that their right and left brain hemispheres were more balanced when compared to both high and lower IQ children who were less creative. According to Primi (2014), creativity and fluid intelligence or abstract reasoning were found to be highly related. Even when reading and writing skills were controlled, the conjoined relationship between creativity and fluid intelligence still existed, which indicated that attentional focus or controlled attention was the cognitive mechanism responsible for both creativity and fluid intelligence (Primi, 2014).

Csikszentmihályi (1997) developed a creative theory of flow or flow theory. Flow is experienced as an intense, focused, and rewarding engagement while actively creating. Csikszentmihályi (1997) said that creative individuals have an unusually fresh perception of reality. They are open, flexible, and experience life in novel ways, and creatives have the ability to attune and focus on what is being attended to with laser point intensity coupled with an abundance of internal energy (Csikszentmihályi, 1997). Csikszentmihályi's state of flow was easily attained and sustained by creatives.

According to Sternberg (2012), creatives consistently approached situations, challenges, obstacles, and projects in new ways rather than by reacting automatically to them. Creativity developed like a habit rather than being something inborn, and Sternberg (2012) referred to being creative as "an attitude toward life," (p. 3). Like any habit, creativity could be promoted or discouraged, and Sternberg believed that creativity was being discouraged through standardized testing. Sternberg's investment theory of

creativity originated with the idea that creative individuals bought low and sold high, meaning that creatives bought low in their presentation of something unique, then they argued with conviction for its worth, and after finally convincing others of its great value, sold it high and moved toward creating the next unique thing. Investment theory of creativity combined six interwoven yet distinct qualities of creatives.

- Intellect including the ability to synthesize information in novel, nonconformist, unconventional ways.
- To be knowledgeable within a flexible context.
- A thinking style that encompassed seeing the big picture and also its details simultaneously such as the ability to see not only the forest, but its trees.
- Personality traits such as possessing a strong sense of self-efficacy, a willingness to stand up to challenges and to tolerate vagueness, and being stubborn yet flexible.
- An innate, highly focused motivational drive.
- Environmental support and reward toward creativity.

Wilber (2000) viewed creativity as the existential essence of the universe. According to Cortright (2003), from a transpersonal perspective, like Wilber's and Jung's, everything is consciousness, spirit, or energy; thus, our reality is created through manifestations of consciousness. Wilber (2000) based his integral theory on the fundamental oneness of the kosmos. Wilber's integral theory, or the theory of everything, synthesized all schools of thought, philosophies and theories and placed them in one

integrated theoretical framework. According to Wilber's integral theory regarding creativity, the immeasurable vastness of consciousness can only be fathomed through a transpersonal understanding of spirituality, whereby it is the energy, motion, and movements of consciousness that are creating the kosmos.

Jung (2001) said that health depended on creativity. According to Henderson et al. (2007), Hoffman and Calvert (2007), and McClary (2007), it was Jung who implemented the arts therapeutically to achieve a state of wellbeing for his patients. From a Jungian perspective, all symptomology was a creative thrust of the psyche to self-regulate (Henderson et al., 2007; Hoffman & Calvert, 2007; McClary, 2007).

Jung (2001) said that symptoms were seen as the psyche's symbol-making function, and the act of making art or music integrated the symbol-making function of creating symbiotically with symptomology, which potentially transcended patients from dis-ease to harmony and mind-body-spirit alignment. Hoffman and Calvert (2007) said that Jungian creativity theory was based on the healing relationship of creativity toward the psyche. Thus, holistic health was dependent on creativity to obtain and maintain a sense of wellbeing.

In application, according to McClary (2007), creating the sound of music acted as the psyche's symbol of the symptom. The tensions that met between dis-ease and wellbeing were transcended through an inherent symbol making process in creating musical tones (McClary, 2007). Jungian art therapy and mandala drawing have psychological and physical health benefits for individuals who have engaged in them

(Blomdahl, Gunnarsson, Guregård, & Björklund, 2013; Caddy, Crawford, & Page, 2012; Elkis-Abuhoff, Gaydos, Goldblatt, Chen, & Rose, 2009; Henderson et al., 2007; van der Vennet & Serice, 2012).

Rogers (1954) said that heightened creativity developed when certain psychological conditions were present. The internal conditions that appeared to lead to creative emergence were openness to new experiences, a self-evaluative and regulatory process, and curiousity or the desire to experiment. These three conditions were believed by Rogers to emerge in a family or environment where psychological safety and psychological freedom were promoted externally. However, heightened creative development was also viewed by Rogers (1954) as the internal challenge of integrating a family environment with the chaotic complexities of a low degree of emotional comfort and a high level of encouragement towards achievement.

Rogers' view of the integrative force of a complex, chaotic family environment contributed to Csikszentmihályi's use of a theory of complexity, which stated that uncertain and chaotic complex family systems were unpredictable but were constrained by order generated rules, to explain a mechanism of flow (Gute, Gute, Nakamura, & Csikszentmihályi, 2008). According to Gute et al. (2008), Csikszentmihályi's family system complexity theory was also based on chaos theory, which proposed that "an order underlies the apparent disorder of all enduring systems," (Gute et al., 2008, p. 344). Furthermore, Csikszentmihályi integrated Rogers' humanistic approach to creativity with Jung's transpersonal, symbolic representation of the psyche. Jung's theory also underlies

the mechanics of creative flow. Csikszentmihályi (1997) said that the space between anxiousness and boredom, present within the ordered chaos of highly complex family systems, served to allow the experience of flow. Thus, for Csikszentmihályi, anxiety resulted in integration and boredom beget differentiation, meaning that the complex, internal challenge of balancing integration and differentiation existed in the same way that dis-ease and wellness found balance within the psyche for Jung.

Adults' experience of becoming creative as a child, through the context of Rogers' concept of internal and external environmental effects on creative development, was explored by DeRobertis (2015). All participants connected becoming creative as a child to being in a setting that they perceived as unconventional, which supported Rogers' view. However, psychological freedom and psychological safety were not all that was needed, and conditions of providing stimulating and challenging experiences, like environmental support and reward toward creativity in Sternberg's theory of investment, were also supported. All participants connected becoming creative as a child with experiencing flow, and they felt a force that fueled an intense drive to create (DeRobertis, 2014).

Creativity in the Western world is often seen and measured as divergent thinking, problem solving, and external action, while creativity in the Eastern world is typically viewed as a process that leads one to inner peace, a divine connection, and an expression of an inner yet ultimate reality (Sen & Sharma, 2011). A study in India that explored perceptions of creativity for Indian adults and children with the goal of revealing implicit

creativity theories within their culture was conducted by Sen and Sharma (2011). Participants saw creativity as something that everyone could learn and develop yet some had a rare gift that came by itself from within and was preexisting (Sen & Sharma, 2011). Sen and Sharma (2011) said that participants did not describe creativity as being the production of a novel, quality, original, cognitive idea, solution, or product; they described creativity as being "the very essence, the fountainhead, the wellspring, the root cause of creation enabling actualization of one's potentialities and talent," (p. 282). Because Indian society is comprised of many religions and is culturally varied, a single cultural theory or model was not expected. However, there was an overall unity revealing what it meant to be creative in regard to agency, and it was seen as an individual's investment of self in the task rather than simply making a product, which was in alignment with Sternberg's theory of investment. Furthermore, creativity was defined as a process approach, meaning that engaging in the process made it a creative act instead of a product's creation. Both Csikszentmihályi's state of flow and Wallas' incubation process explained the emergent themes of self-based engagement, holistic involvement, and creative processes (Sen & Sharma, 2011).

Henson-Dacey (2015) explored the extent of flow in U.S. high school art students while having a creative experience and found that all participants entered the flow state. Inner motivation, openness, and curiousity were the characteristics of the creative process, and as flow brought optimal awareness of the task, it became a holistic experience (Henson-Dacey, 2015).

The experiential processes of creativity regarding flow and synthesis for professional artists was explored by Nelson and Rawlings (2007), which resulted in a total of 19 essential constituents described by the artists within the general structure regarding the experience of the artistic creative process. From these constituents, themes were interlinked and arranged into three main operative dynamics or underlying psychological force or movement, and the creative process of the artists' experience was based on movement within these closely related and interdependent dynamics (Nelson & Rawlings, 2007). The identified main operatives were:

- Intuitive/analytic: effortlessness, loss of awareness of one's body, technique, or the lapsing of time, being in the zone, and flow.
- Division and unity in self-awareness: an absence of distinction between artist and medium.
- Freedom and constraint dynamic: just before entering the flow state there was a feeling of constraint that moved toward flow's intense, intuitive, selfless focus, and once flow was attained, the artist felt a sense of freedom.

It was the pure enjoyment of the creative experience that motivated individuals to become artists (Nelson & Rawlings, 2007). Furthermore, the shift in self-awareness where contrasting elements were synthesized and emphasized, provided an energized result that also supported the idea that the essence of the creative experience was

spiritual. Csikszentmihályi's theory of flow as an experiential state and an essential creative process was supported.

As creating is the highest level of cognitive functioning (Rich et al., 2015), it follows that creativity is linked to increased intellectual abilities, heightened attention and focusing abilities, drive, openness, flexibility, and hemispherical balance, (Kershner & Ledger, 1985; Primi, 2014; Rogers, 1954; Sternberg, 2012), In addition, creative experiences offer intense focus, increased energy, freedom, relaxation, wonder, pleasure, holistic health, self-awareness, inner peace, conscious connection to the kosmos, and a sense of wellbeing (Csikszentmihályi, 1997; Jung, 2001; Wallas, 2014; Wilber, 2000). Therefore, creative force can be considered an aspect of genius just as the act of creating can provide mental-physical-spiritual alignment and wholeness.

Mindfulness

As an ancient Buddhist practice, MM originated more than 2500 years ago (Nanda, 2009). Current MM practices according to Nanda (2009), despite their origin, lack the esoteric discipline and traditions of Buddhism. MM has been defined as a contemplative, attentional meditation that is focused on present awareness through purposefully paying moment-to-moment attention, seeing everything anew and void of judgment (Kabat-Zinn, 1994; Langer, 1989; Nanda, 2009).

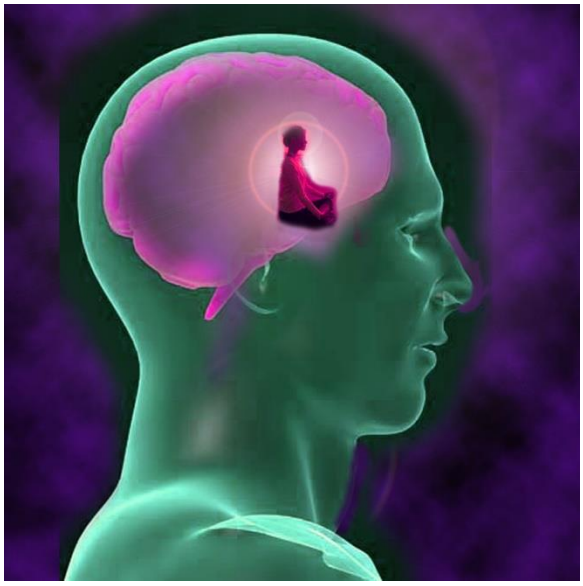


Figure 2. Visual representation of view from center of the head MM: mind-body-spirit alignment.

The two leading strands of MM research belong to Kabat-Zinn and Langer (Hart et al., 2013). Kabat Zinn (1994) researched the therapeutic effects of MM on individuals and developed mindfulness-based treatments. Langer (1989) researched the concepts of mindfulness and mindlessness. Mindfulness is paying attention in the present moment to whatever one is doing and experiencing, and seeing everything as new and unique, which suspends judgment from past experiences and beliefs. Mindlessness was the term Langer used to describe the patterned thoughts, behaviors, and reactions that develop from past experiences and beliefs, which become automatic and habitual.

Kabat-Zinn's and Langer's research designs, intentions, methods, and motivations varied, however, Hart et al (2013) said that Langer and Kabat-Zinn agreed that the core mechanism for MM was self-regulation of attention. Kabat-Zinn's MM was termed

meditative while Langer's was referred to as creative; but the two strands converged in MM's core mechanism being self-regulated attention, definition of MM, and the recognition of its many benefits (Hart et al., 2013).

Differences in their streams of research were primarily their goals and the components of MM. However, Hart et al. (2013) included a difference in philosophies whereby Kabat-Zinn's philosophy of MM was more eastern and Langer's was more western. This was a minimal theosophical difference as both recognized MM as originating in Zen Buddhism.

Langer (2014) integrated the practice of Buddhist MM with socio-cognitive mindfulness in developing her approach and has never disputed its Eastern philosophical origins. Langer's MM was more research oriented than Kabat-Zinn's rigorous Buddhist style regimen of meditative practice. Kabat-Zinn (1994) said that MM was not Buddhism, which is a religion. As for having differing goals, Hart et al. (2013) said that Kabat-Zinn's research was primarily concerned with developing mindfulness-based therapeutic interventions to improve mental health and wellbeing, while Langer's research focused on MM interventions designed to enhance learning and optimize creative potential.

Felder, Aten, Neudeck, Shiomi-Chen, and Robbins (2014) credited the introduction of the foundations of mindfulness to the Western world to Husserl who was the founder of phenomenology. Felder et al. (2014) explored the field of contemplative science and found mindfulness at the core of existential phenomenology and humanistic psychology. Felder et al. (2014) said that Husserl's student, Heidegger, who developed

phenomenological reflection, inquired into the Eastern thought of non-dualism and meditative practices. According to Felder et al., Heidegger titled his work as Besinnung, which translated from German into English was Mindfulness. Shortly after Heidegger's work was published in 1938, Merleau-Ponty explored the phenomenology of mindfulness, which resulted in his denial of dualism, idealism, behaviorism, and rationalism (Felder, et al., 2014). Felder et al. (2014) credited Rogers' humanistic psychology with pioneering mindfulness' non-judgmental acceptance and moment-to-moment awareness as contributing to Linehan's development of DBT, which is a mindfulness-based treatment used for treating individuals with psychological and behavioral disorders.

Lutz, Jha, Dunne, and Saron (2015) developed a phenomenological matrix that reviewed and addressed the wide arc of research on MM. The neurophenomenological matrix they developed can be used as a tool to stimulate research and generate hypothesis (Lutz et al., 2015). Lutz et al. (2015) conceptualized MM practices as "a set of attention-based, regulatory, and self-inquiry training regimes cultivated for various ends, including wellbeing and psychological health," (p. 632).

From a neurocognitive perspective, Lutz et al. (2015) defined the multi-faceted components of MM as a contemplative science. Lutz et al.'s phenomenological matrix of mindfulness integrated practices to serve as a model for contemplative science research. Techniques such as dialectic behavioral therapy (DBT), MBSR, and mindfulness-based cognitive therapy (MBCT) are used as therapeutic interventions (Lutz et al., 2015). The

differing approaches and goals of research on MM as a heuristic or applied method, had advanced it to a multidisciplinary phenomenon that left a lack in synthesis. MM or contemplative practices have been researched toward and used to develop potential strategies for understanding the mind, alleviate pain and stress, increase mental health and wellbeing, improve self-regulation related to learning and education practices, and to offer MM training to U.S. military soldiers and their families for attentional focus, anxiety reduction, and post-traumatic stress disorder (PTSD) prevention and relief (Lutz et al., 2015).

Lutz et al (2015) identified three general meanings assigned to MM that made reaching integration difficult:

- Mindfulness as a trait resulted in contradiction.
- Mindfulness as a soteriological process or spiritual path was too broad.
- Mindfulness as a cognitive process appeared unable to account for variously styled practices, expertise levels, and also lacked specifics.

Lutz et al. (2015) asked, “When one is engaged in a formal mindfulness practice, what observable, instructable, and manipulable features of experience are most relevant to training in mindfulness?” (p. 637), and data included seven types of answers that fell into one of the two following groups:

- The 3 primary features of experience were object orientation, dereification, and meta-awareness. Primary features or functional dimensions referred to 3 types of

answers that pertained to functions that shared the same main targets regardless of MM training style.

- The 4 secondary qualities of experience were aperture, clarity, stability, and effort. Secondary qualities or qualitative dimensions described the other 4 types of answers, which were relevant and experiential qualities affected by MM.

Both Kabat-Zinn (1994) and Langer (1997) have researched and developed MM as an educational tool to enhance learning. In education, a mindfulness movement has raised awareness of MM intended to bring it into primary and secondary schools for students and teachers with programs such as Mindful Schools, the Mind Body Awareness Project, the Association of Mindfulness in Education, Mindful Life, and the Hawn Foundation (LaRock, 2014). In the U.S., some Colleges and Universities are teaching MM and certifying instructors (Zajonc, 2013), some primary and secondary schools are using MM in special education to assist students with mood stabilization (Black & Fernando, 2014; Viafora et al., 2014), and MM training is being used in the military for soldiers and their families for stress, treating trauma, and as a preventative measure for possible future trauma (Brayboy, 2014; Purser, 2014; Singal, 2014).

Relationship of MM and Creativity

Langer, Hatem, Joss, and Howell (1989), said that a mindful response was creative and spontaneous; therefore, acting creatively or mindfully were considered as interchangeable. Langer (2006) revealed that individuals' reported experiences of Csikszentmihályi's flow while creating were identical to individuals' reported

experiences of MM. Langer's MM research looked toward the synthesis of learning, education, and creativity and often used MM as the independent variable and mindfulness/creativity as the dependent variable. Studies had inferred that after briefly practicing MM, participants had an improved level of creative ability (Grant & Langer et al., 2004; Langer, 2006; Langer et al., 1989; Langer, & Imber, 1979; Langer et al., 2010).

Horan (2009), primarily through examining EEG studies, found an increased low-alpha activity that involved decreased frontal lobe activity present in individuals practicing MM, and low-alpha and decreased frontal lobe activity was identically present in individuals that were actively creating, for example: composing or playing music, writing, painting or drawing a picture. Although the findings were correlational and inferred no direction of effect, Horan (2009) hypothesized that that practicing MM could enhance creativity, with MM working as a primer, through the brain's ability to change or neuroplasticity.

It was in the early 1970s that the similar attributes of creativity and meditation practices were first investigated (Horan, 2009). Results of these mostly quantitative studies were varied. Horan (2009) identified several weaknesses and limitations. Many of the studies did not identify the style of meditation used, there were varying lengths of practice by meditators, differing scales used to measure creativity, and some more qualitative inquiries that had shown support of the connection were overlooked or not reported (Horan, 2009).

Schwartz (1973) conducted research that measured primary process creativity in storytelling. Schwartz found that TM teachers scored higher than controls. However, Schwartz (1974) found that TM teachers performed no better or worse than controls when using the Barron Welsh art scale and Wallach-Kogan tests to assess creativity levels.

Cowager (1974) looked at 27 trained meditators and used what appeared to be an MM strategy for some and matched them with others that were practicing relaxation. After four weeks, the Torrance tests for creative thinking (TTCT) were administered by Cowager. Although the individuals practicing MM scored higher than those practicing relaxation, results in regard to creative thinking were not significant for both the meditation and relaxation group (Cowager, 1974).

Cowager and Torrance (1982) was spurred by Torrance who saw that Cowager's data from the previous study showed some unusual responses regarding creativity for the meditators. Cowger and Torrance (1982) revisited the data, and they used updated indicators, which showed significantly higher scores for the meditators across the subscales of invention, fantasy, perceptual change, internal visualization, heightened consciousness of problems, sensory-based experience on the verbal tasks, synthesis, unusual visualization, expression of emotion and feeling, and humor. The relaxation group showed some decreases in 9 out of 15 subscales and an increase in sensory experience, unusual visualization, and synthesis in the re-analysis (Cowager & Torrance, 1982).

Domino (1977) ran a 5 week meditation-creativity experiment that used three groups: one with TM, one with MM, and one control with no meditation. They pre and post-tested the three groups with three creativity tasks: remote associates test (RAT), Franck drawing completion test, and the similes test. Domino (1977) results were not significant; however, a survey asking the participants to rate what their creative experience was after treatment did show variance between the control group and the meditation groups. Both meditation groups gave their creative experience significantly higher scores than the control group did; but overall, Domino considered the findings inconclusive.

Orme-Johnson and Granieri (1977) had results that supported the connection between meditation and creativity. The study had 60 subjects, used the TTCT for pretest and posttest, and Orme-Johnson and Granieri found significantly increased originality/fluency in visual-spatial creativity. Orme-Johnson, Clements, Haynes, and Badaoui (1977) used the TTCTVerbal to test 22 TM meditators. All subscales of creativity: flexibility, fluency, originality, and novel uses were positively correlated with meditation experiences (Orme-Johnson et al., 1977).

Ball (1980) administered the TTCT to TM subjects and a control group that were attending a developmental psychology course. Verbal and figural originality scores were higher for the TM practitioners than were scores for the control group. Ball (1980) also found that on the verbally administered sounds and images test for auditory creativity that TM subjects had higher originality scores than the control group did.

O'Haire and Marcia (1980) tested the creativity of 114 meditators with the TTCT. O'Hare and Marcia found no relationship between meditation and creativity. However, the females that had practiced meditation long-term had the highest scores for figural originality.

Langer et al. (1989) included three studies that assessed whether or not the way information was presented would affect whether the information would be used mindlessly or mindfully/creatively. Two of their experiments looked at whether presentation methods, absolute or theoretical/conditional, would yield either a more mindless or a more mindful/creative response from children and college students. In the absolute presentation method experiment, subjects were told: this object is a (blank), and in the conditional or theoretical presentation method experiment, subjects were told: this object could be a (blank) (Langer et al., 1989). Both children and college students had a mindless use of information response after the absolute instruction. Both children and college students were able to offer various ideas or respond creatively to the information presented in a conditional manner (Langer et al., 1989).

For the third experiment, Langer et al. (1989) presented two sets of information to student teachers using the absolute method for one set, and the conditional method for the other set, and the independent variable of confidence was added for both sets (Langer et al., 1989). It was found that the combination of confident and conditional/theoretical presentation of information resulted in provoking the highest levels of mindfulness/creativity (Langer et al., 1989).

Grant, Langer, Falk, and Capodilupo (2004) conducted two field experiments with 208 adult participants. In the first experiment, Grant et al. introduced mindful drawing as a brief MM intervention that manipulated novelty for half of the participants (n=104). Mindful drawing was explained by Grant et al. (2004) as drawing with line by line instruction. MM intervention was effective in the first experiment as it enabled participants to escape their preconceived conceptions about their artistic ability or lack of ability (Grant et al., 2004).

Grant et al. (2004) conducted another experiment with the other half of the participants (n=104). Their second experiment did not include the MM intervention of mindful drawing, and the participants tended to be unable to overcome their feelings of incompetence and were unable to complete the drawing task. Results showed overall that there was a significant relationship between mindful creativity and levels of perceived competence (Grant et al., 2004).

Langer, Pirson, and Delizonna (2010) examined the negative effects of mindless social comparison on creativity. Participants were shown art before a brief MM intervention and relied on mindless social comparisons based on previously learned social standards (Langer et al., 2010). Once participants were briefly trained to be mindful, mindless comparisons based on preset social standards about what art was diminished (Langer et al., 2010).

Langer (2006) explored the author's journey of experiencing mindful creativity through painting. Based on a synthesis of her experiences, applicable research, artists'

ideas, and various philosophies, Langer supported creativity as mindfulness and vice versa. The philosophical themes in Langer (2006) included authenticity, non-judgment, non-dualism, open awareness, and alignment. Langer's conceptual integration of MM and creativity were explained in Horan (2009) through "neuropsychological investigations into the nature of creativity and meditation, coupled with a theoretical framework describing transcendence and integration as key components common to both processes," (p. 201).

Horan (2009) presented a theoretical model that linked creativity to meditation through a neuropsychological connection based on data from EEG studies. Horan compared the brain images of creatives while creating and meditators while meditating. The EEG brain images for individuals that were actively creating were identical to the EEG brain images of individuals practicing MM. With this correlation between MM and creativity, causality was not inferred. However, it was hypothesized that MM enhanced creativity, and this neuropsychological connection offered an explanation. Horan (2009) said that attentional meditation's role in increasing creativity was based on neuroplasticity, or the ability of the brain to organize and form new neural connections. With MM practice creating new or organizing and strengthening existing neural pathways, anxiety was relieved and the learning potential was optimized (Horan, 2009).

Horan (2009) was based on large amounts of empirical evidence gathered primarily from EEG (electroencephalogram) studies, and some data used were from functional magnetic resonance imaging (fMRI) studies. The fMRI shows brain activities

measured by detected blood flow changes (Breedlove et al., 2010). Horan (2009) categorized three differing attentional meditation practices with the first as MM that was present oriented, open, non-judgmental, with detached attention towards feelings, thoughts, and sensations, concentrative meditation (CM) that involved focusing on a thought, mantra or repeated sound, feeling, or sensation, and CbM, otherwise known as TM, which also used a mantra but with an absence of concentration on thoughts to develop awareness and transcendence.

Horan (2009) described transcendent knowledge in Kantian terms as precognition toward an object before it had been experienced. In addition, ideas and perceptions, within an intended transcendent state, were the foundation of creativity. The idea of creative transcendence that Horan presented was aligned with Wallas' four phase model of creative processing, whereby creative incubation, as s transcendent or subconscious process taking place during sleep, sets the stage for illumination, and the psychophysiological energy to create was provided by intention.

The psychophysiological energy of creative force was in alignment with flow theory, whereby flow was experienced as an intense, focused, and rewarding engagement while actively creating that involved focusing on what is being attended to with laser point intensity coupled with an abundance of internal energy (Csikszentmihályi, 1997). Wilber (2000) used the idea of creative transcendence in describing creativity's manifestation as transcendence being joined with the integration of novel experience or knowledge in the context of existing information, in which the transcendence of

boundaries allowed for further transcendence. The transcendent nature of meditation was based on the traditional intention of meditation being to reach a sustained state of transcendence that was integrated or aligned with the intellectual and sensory functioning of the body (Horan, 2009).

According to Wilber (2000), each and every moment for the meditator was creation, which was brought about through the rich interplay and kosmic connection of integration and transcendence, with creativity being the existential essence of the universe or kosmos. At this transpersonal level of creating, the meditator, as an observer of the self, became pure consciousness (Horan. 2009). The difference between meditators and creatives was that meditators sought sustained transcendence through moment-to-moment focus to solve the limitations of phenomenal existence in order to attain a sense of wellbeing while through temporary transcendence, creatives sought to express themselves, to contribute a product, or find a solution (Horan, 2009). Horan (2009) pointed out that at the neuropsychological level, the differences in intention for meditators and creatives were nonexistent as the neural processes were the same.

Synchronized neural activity at its core was explained by Horan (2009) as being the key element of both transcendence and integration, which was defined as defocused or broad focused attention and was considered to be the root of both creative and meditative processing and efficacy. For this study's purpose of exploring MM's role in creativity, MM will be the primary meditation category focused on. In reference to the EEG studies, a brief description of the suggested functions of the brainwave frequency

bands that were affected during the activity of MM and creating according to Horan (2009), were the following:

- Alpha (7. 5-12. 5 Hz) reflected low cortical arousal and important in memory retrieval and encoding. Both MM meditators and creatives had increased low alpha/low cortical arousal.
- Theta (4-7. 0 Hz) important in detecting novelty and imagination. Theta power increase was evident for MM meditators and creatives.
- Delta (0. 5-3. 5 Hz) important to integration and transcendence. Increased synchronized delta power was associated with creative insight and was important to MM.
- Gamma (25-42 Hz +) reflected high cortical arousal, heightened awareness, the binding of various levels of sensory-cognitive processing. Gamma may be responsible for the movement of solution focused cognitive processing from unconscious to conscious states, which was suggested by increased gamma activity for creatives and MM practitioners.
- Beta (13-24. 5 Hz) reflected high arousal phenomenon that suggested faulty attentional mechanisms related to stress.

Horan (2009) said that if widely distributed, high beta and gamma activity allowed a spontaneous, intensely focused spatial-temporal binding, which was often implicated in the mentally complex singularity of Csikszentmihályi's flow experience. Horan (2009) mentioned that this beta-gamma band connection was considered controversial and that

there needed to be more EEG research during the flow experience to substantiate this notion.

Horan (2009 said that MM supported the incubation and illumination phases of creative thinking, increased attentional benefits and abilities to be completely focused or absorbed, and improved cognitive flexibility. MM was not the sole mechanism to solve problems (Horan, 2009). The Horan (2009) summary of MM insights follow::

- Creative thinking supported by MM through an increased, open awareness found in states of low cortical arousal (i.e., increased low alpha).
- Cognitive flexibility promoted by MM through the effect of objective, detached witnessing.
- No support for MM being a mechanism to solve specific creative problems.
- When on its own, transcendence induced through meditation appeared to not have an effect toward the realization of creative solutions.
- Transcendence integrated gradually with waking, dreaming, and sleep states facilitated spontaneous creative expression.
- Theta trains present in MM motivated an implicit orientation toward blissful transcendence.

Theta wave similarities for MM meditators and creatives indicated both to be implicitly motivated to encode novel information and transcend limits (Horan, 2009). Transcendence induced by MM alone was not enough to foster creative solutions or actions, but the increased brain hemispheric coherence that involved the integrative and transcendent properties of theta, gamma, delta, and low-alpha frequencies present during MM, promoted the level of synchronized, holistic brain functioning needed to think and act in highly creative ways (Horan, 2009).

Ren et al. (2011) investigated whether insight was inspired during sleep through the incubation process and if MM promoted insight. Ren et al. recruited 48 participants who had no meditation training and put them into three randomly assigned groups. Two groups were taught a simple MM technique: group P10 counted their breaths to 10, and group P100 counted 100 breaths. The third was a control group that was not taught the MM technique and rested while the other groups meditated (Ren et al., 2011). Participants were given 10 insight problems to solve in a pretest, P10 and P100 meditated while the control rested, and then they were given the 10 insight problems again as a posttest Ren et al. (2011).

Ren et al. (2011) stated that both the P10 group and P100 group solved significantly more previously failed insight problems than the resting group did based on comparing pretest and posttest scores. Ren et al. (2011) also found that while maintaining a mindful, alert meditative state, the P10 group showed more insight during mental relaxation, while the P100 group had a negative correlation with insight. The use of EEG

scans determined relaxed states from alert ones, and the response times for solving the insight problems showed no difference under all conditions (Ren et al., 2011).

In Walsh (2013), 60 participants were randomly assigned three times into three groups that were tested on three different occasions to determine possible effects of brief MM interventions on solving insight problems. The three conditions or independent variables of the groups were: a brief MM intervention; a sham mindfulness intervention or relaxation intervention; and a control with no intervention. Results showed that participants tested directly after the intervention in the MM group significantly outperformed both the sham and control groups on the insight problem-solving task, which suggested that the MM mechanisms that affected creativity went beyond its inducement of relaxation (Walsh, 2013).

Interested in the relationship of creativity and MM components FA and OM, Colzato et al. (2012) assessed OM's and FA's impact on the creative processes of divergent and convergent thinking. The main focus of Colzato et al.'s study was to investigate whether FA and OM components drove an effect on creativity through specified cognitive control states convergent and divergent thinking.

According to Colzato et al. (2012), although divergent and convergent thinking were considered as central processes to generating creativity, they represented different components of it. Convergent thinking was the process of generating one possible solution through a focused or strong top-down control bias. Divergent thinking allowed

the generation of many new ideas and possible solutions through broad or weak top-down control bias (Colzato et al., 2012).

The hypothesis for Colzato et al. (2012) was that FA would promote convergent or strong top-down thinking and not promote divergent thinking, while OM would facilitate divergent or weak top-down thinking and not convergent thinking. Colzato et al. anticipated that positive mood altering effects of MM could skew the results as positive mood showed positive influence on divergent thinking and no influence on convergent thinking, which suggested that OM's effect on divergent thinking could be easier to see than FA's effect on convergent thinking. Therefore, Colzato et al. (2012) assessed whether mood was affected similarly by FA and OM and assessed participants' perceived mood.

Participants were 19 meditators with an average of two years practicing both FA and OM MM (Colzato et al., 2012). There were three conditions: FA session; OM session; and BA baseline/control or guided visualization session. Participants were led through the conditions by the same instructor who was certified in MM, TM, and Samatha meditation training (Colzato et al., 2012). Participants were administered the RAT for convergent thinking, an alternative uses task (AUT) for divergent thinking, and a subjective measure of mood after all three types of sessions. Two independent readers, blinded to experimental conditions, scored the RAT and AUT for originality, fluency, elaboration, and flexibility (Colzato et al., 2012).

Colzato et al. (2012) stated that all four criteria of the AUT were scored with an advantage for OM over FA and BA sessions; however, scores of the advantage were reliable for originality, fluency, and flexibility while scores for elaboration were not significant (Colzato et al., 2012). Despite RAT scores being slightly better after FA, results were not significant between the FA, OM, and BA conditions. As improved mood resulted from both meditations, Colzato et al. (2012) suggested that improved mood increased divergent thinking, while decreased convergent thinking affected RAT scores. OM positively impacted divergent thinking and suggested that all types of meditation do not have the same effect, which explained past MM/creativity experiments' varied results (Colzato et al., 2012).

Capurso, Fabbro, and Crescentini (2014) presented a commentary to Colzato et al. (2012). Capurso et al. discussed the neurocognitive connection as well as research that suggested MM's observe and accept approach may have improved attention regulation and executive functioning abilities. Capurso et al. (2014) suggested further investigation based on the Colzato et al. (2012) hypothesis that the positive mood reported after FA meditation could have negatively affected RAT performance, Capurso et al. (2014) suggested investigating FA or OM influences on insight problem solving and logical thinking for naïve meditators. Whether there were effects of MM on creative performance when it was not tested directly after meditating was also suggested.

Colzato, Szapora, Lippelt, and Hommel (2014), said that the rationale for more concentrative FA was that Colzato et al. (2012) suggested that meditators were too

relaxed, which improved their mood, thus inhibiting performance on the RAT. Colzato et al. (2014) investigated MM/creativity with the following three questions Capurso et al. (2014) suggested.

- Did prior OM/FA experience have an impact on creativity tasks when meditators and novices were compared?
- Would a higher level of concentrative effort used in the FA condition show a significant effect on convergent thinking?
- In regard to convergent/divergent thinking performance and convergent strategies or analytical vs. insight, were they, and to what degree, affected by FA/OM?

To obtain a more reliable assessment of convergent thinking, the compound RAT (cRAT) was used. Colzato et al. (2014) had two groups with a total of 40 participants; novices (n=20) and meditators (n=20). A limitation of this study design was that there was not a control group. When the novices' AUT scores were compared to the meditators', divergent thinking was found to be robust despite prior MM experience (Colzato et al., 2014). Differences were found, however, in the strategy used for solving convergent thinking problems; meditators most often used an insight strategy while novices most often used an analytical strategy (Colzato et al., 2014).

For the meditators, more cRAT items were not solved analytically after FA compared to OM. More items on the cRAT were solved by the meditators with insight after OM than after FA meditation (Colzato et al., 2014). Therefore, for the first question,

divergent thinking enhancement achieved after OM was not dependent upon prior MM experience (Colzato et al., 2014).

For the second question, Colzato et al. (2014) made a modestly successful effort to reduce mood improvement through more concentrated FA. However, FA did not improve analytical thinking especially for the novices. The slight advantage shown over novices by meditators in problem solving was after OM meditation (Colzato et al., 2014).

For the third question, Colzato et al. (2014), stated that after FA, novices and meditators performed comparably. After OM, meditators shifted strongly from an analytical strategy to an insight strategy. Meditators' shift from an analytical to an insight strategy accounted for 75% of their correct solutions (Colzato et al., 2014).

Colzato et al. (2014) suggested that "a temporary mind state that reduces top-down control and allows for a more associative spreading of activation in memory," was induced by OM (p. 16). OM was observed to impede strictly analytical strategies in the convergent thinking tasks but supported alternative or insight solving strategies for meditators. FA meditation had no effect on convergent or divergent thinking (Colzato et al., 2014).

According to Colzato et al. (2014), future studies should address whether creative performance enhancement was obtained only directly after OM, and if so, the duration of the effect. Also if MM was considered to be a form of cognitive training, individual differences and genetic predispositions would need to be accounted for to find the type of

MM, OM or FA, most beneficial for an intended task or intervention (Colzato et al, 2014).

Ding et al. (2014) investigated if short term IBMT, MM that focuses on the body in the present moment, improved creative performance and what role mood might play in creativity's possible improvement. IBMT was shown to be successful when used therapeutically to reduce stress, improve attention, and effect mood (Ding et al., 2014). According to Ding et al., IBMT is comprised of MM training's key components combined with traditional Chinese medicine.

Ding et al. (2014) randomly assigned 40 participants to either a short term IBMT group (n=20) or in a relaxation training (RT) control group (n=20). Creative performance and mood were assessed with the TTCT and the positive and negative affect schedule (PANAS) respectively; furthermore, both the TTCT and PANAS were administered in pre and post treatment conditions (Ding et al., 2014). Ding et al. (2014) stated, "Taken together, we hypothesize that compared to RT (i) IBMT will produce greater creativity (indexed by TTCT) (ii) IBMT will improve emotion (indexed by PANAS scales) and (iii) this improved emotion may mediate the change in creativity," (p. 2).

Ding et al. (2014) results were as predicted with the IBMT group outperforming the RT group significantly after treatment on the TTCT. Positive affect (PA) significantly increased after treatment while negative affect (NA) decreased significantly for the IBMT group when compared to the RT group (Ding et al., 2014). The relationship between

emotion, creativity, and MM was deemed by Ding et al. (2014) as needing further research.

Ding, Tang, Deng, Tang, and Posner (2015) sought to determine what individuals would be most benefited by IBMT. In Ding et al. (2015), 84 participants, without any prior meditation training, were randomly assigned to either the IBMT group (n=42) or the RT control group (n=42). Tests for personality: Eysenck Personality Questionnaire (EPQ), mood (POMS), and creativity TTCT were administered both pre and post treatment condition.

Ding et al (2015) determined at pretest that anger, depression, introversion × vigor, emotional stability × vigor, and fatigue were the five main predictors that accounted for 57% of the variance when compared to the changes in creativity before and after the IBMT condition. Results indicated that for mood and personality, the percentage of variance was twice as high in the IBMT group as it was for the RT group. This meant that not only was IBMT improving creativity supported, differences among individuals were also predicted by their assessed mood and personality (Ding et al., 2015).

Ding et al. (2015) stated that research was needed to further identify the individual differences within the relationship of creative performance and MM. Ding et al. related that self-regulation and attention were significantly improved by short term MM in Tang et al. (2007), Thus, self-regulation and attention were considered by Ding et al. (2015) as mechanisms for improving creative performance.

In Zedelius and Schooler (2015), individual differences among creatives were discussed, and creatives were portrayed as stereotypically having either a mindful-focused or a mind wandering-distracted or broad thinking style. Mind wandering and mindfulness were considered by Zedelius and Schooler to be opposite thinking styles or constructs and investigated which thinking style was most conducive to being creative. Zedelius and Schooler (2015) also investigated whether both mindfulness and mind wandering benefited creativity. Zedelius and Schooler (2015) conducted two investigations.

In the first study, Zedelius and Schooler (2015) had 76 participants that were informed about what constituted an analytic strategy and an insight strategy. All participants were presented with 30 compound remote associates (CRA) problems to solve, with 30 seconds given for each problem, and were asked to self-report which strategy was used (Zedelius & Schooler, 2015).

Zedelius and Schooler (2015) had participants complete the mindful awareness and attention scale (MAAS). MAAS scores did not significantly predict accuracy in either self-reported insight or analytical problem solving. MAAS scores were negatively correlated with self-reported insight problem solving on the CRA and positively correlated with the self-reported analytical strategy (Zedelius & Schooler, 2015).

In the second study, Zedelius and Schooler (2015) had 120 participants that were informed about what constituted an analytic strategy and an insight strategy after participants were randomly assigned into one of two groups; control (n= 60) or treatment

(n= 60). Both groups were given 48 CRA problems, with 30 seconds of time for each problem. Zedelius and Schooler (2015) gave the treatment group instruction as to how to solve each problem, either with insight or analytically, and the control group did not receive instruction. The control group self-reported the degree of insight vs. analytical problem solving used, and the treatment group self-reported how natural they felt following instructions to use either an insight or an analytical approach (Zedelius & Schooler, 2015).

The MAAS was then administration to both groups. Higher MAAS scores for the treatment group were positively correlated with higher performance on the CRA for both insight and analytical strategies, and the treatment group reported that the insight problem solving felt more natural (Zedelius & Schooler, 2015). For the control group, MAAS scores were not predictive of accuracy in either self-reported insight or analytical problem solving, scores were negatively correlated with self-reported insight problem solving, and positively correlated with self-reported analytical strategy (Zedelius & Schooler, 2015).

Zedelius and Schooler (2015) reported that greater mindfulness was consistently associated with increased problem solving performance when problems were approached with analytic strategy; whether analytic strategy was spontaneously adopted as in the first study or instructed as in the second study. Zedelius and Schooler (2015) reported that the relationship between mindfulness and problem solving was negatively correlated when participants spontaneously adopted an insight approach in the first study, and absent

when the treatment group were instructed to approach problems with insight in the second study.

The following are examples of some of the issues in Zedelius and Schooler (2015):

- The first issue was in regard to Zedelius and Schooler suggesting that mindfulness and mind wandering were opposite constructs. The opposite construct of mindfulness is mindlessness (Langer, 1989), not mind wandering. Mindlessness is the act of doing things in an automated, patterned, and repetitive fashion, and seeing things based on past experience as opposed to being mindfully aware in the present moment, and seeing things in novel ways, which suspends past judgment (Langer, 1989). Mindfulness was described by Zedelius and Schooler (2015) as a focused or strong top-down control bias that was the FA component of MM described in Colzato et al. (2012; 2014). Mind wandering, as described by Zedelius and Schooler (2015), was a broad or weak top-down control bias that was the OM component of MM described in Colzato et al. (2012; 2014). Baird, Smallwood, Mrazek, Kam, Franklin, and Schooler (2012) found that mind wandering cultivated the incubation phase of creativeness. Therefore, mindful or FA and mind wandering or OM aspects of creativity are at alternate ends of the MM continuum, whereby according to Langer (2006), creativity and mindfulness were the same and

were interchangeable. Therefore, mind wandering and mindfulness were not opposite constructs.

- The second issue had to do with validity for the MAAS. The MAAS, according to Brown and Ryan (2003), was designed to assess mindful awareness, meaning it measured an individual's level of awareness of being mindful, so a low MAAS score would not necessarily denote mind wandering, but it would denote mindlessness.
- The third issue was that independent variables in the first study were vague and there was no control group.
- For the fourth issue, divergent creative thinking was not related to insight and convergent creative thinking was not related to being analytical.
- The fifth issue was that participants were not identified as being creatives, novices, or meditators leaving confusion as to what was really being assessed.

Ventrella (2016) looked at effects MM, as a reflective practice intervention, had on creativity as it pertained to novelty for organizational leaders. Pre and post testing was used with mindfulness reflective training serving as the IV and creative novelty was the DV. Ventrella (2016) used the Langer Mindfulness Scale to measure the DV due to its overall measuring of creative novelty and novelty subgroups: novelty producing, novelty seeking, and novelty engagement.

Ventrella (2016) recruited 23 leaders from three organizations. All participants were pretested, received MM training for 4 weeks where they practiced reflective mindfulness, and were tested again. Ventrella found that mindfulness reflective practice as a MM intervention did increase overall creative novelty for leaders. Posttest scores were significantly higher for creative novelty overall and for seeking novelty. Novelty producing and engagement scores were both slightly higher posttest than pretest; however, they were not significant (Ventrella, 2016). Limitations listed were the data collection method, small sample size, no control group, and short four week time period for MM training (Ventrella, 2016).

Lebuda, Zabelina, and Karwowski (2015) conducted a meta-analysis of 20 independent MM/creativity studies from 1977-2015, which suggested that creativity required mindfulness. Lebuda et al. looked only at peer reviewed and published quantitative investigations that directly addressed both MM and creativity, and both trait and state mindfulness, and the FA and OM components of MM were included. Experimental research without a baseline or control group such as Colzato et al. (2014) and the first study of Zedelius and Schooler (2015) were omitted, and Lebuda et al. (2015) excluded theoretical articles like Horan (2009).

Lebuda et al. (2015) conducted a three-level meta-analysis on 20 independent samples that contained 89 correlations with a total of 1549 participants. In both correlational and experimental studies analyzed, the association's effect size was the same, meaning there were no differences found, which Lebuda et al. (2015) considered as

important in showing that not only were MM and creativity correlated, but that MM also increased creativity. Lebuda et al. said that MM interventions, especially OM, enhanced insights beneficial for creative self-concepts and abilities.

Limitations were the inability to analyze the relationship of all possible moderators from the small number of studies (Lebuda et al., 2015). Future research was recommended to differentiate the levels, aspects, and types of creativity linked to MM (Lebuda et al., 2015). Lebuda et al. (2015) noted the following investigations, Colzato et al. (2012), Ding et al. (2015), Ding et al. (2014), Domino (1977), O'Haire and Marcia (1980), Ren et al. (2011), and Zedelius and Schooler (2015), that were reviewed in this literature.

Significance of the Study

Creativity was discouraged in education through assessment measures such as standardized testing and testing in general (Sternberg, 2012); however, research showed that MM can alleviate this problem. Even brief MM practice can improve creative performance; therefore, bringing MM into schools to be practiced each day, for as little as ten minutes, could assist students with attention and self-regulatory functions, reduce anxiety, improve mood, and increase creative output and potential.

From an educational perspective, with creating being at the very top of the intellectual hierarchy in Bloom's cognitive taxonomy (Overbaugh & Schultz, n.d.; Svinicki & McKeachie, 2011), the importance of gaining deeper understanding toward MM's role in promoting creativity was imperative. There was little to no empirical

evidence showing to what degree MM practice longitudinally influenced creativity. A phenomenological exploration allowed deeper understanding of MM and creativity's interconnection through the exploration of participants' lived meanings regarding experiences (Creswell, 2013; Giorgi, 2009). Phenomenological explorations into experiences of creating for MM practitioners increased the depth of understanding about MM's role toward creative enhancement and was significant in supporting current movements toward MM's practical applications in education.

Context Review

A context review allowed the study to be viewed through a broader framework thus showing how it built upon or supported a theme of prior research (Neuman, 2006). Context provided a way to understand phenomena, and meaning was connected to the context within which events naturally happened (Neuman, 2006). Information could be distorted or misunderstanding could occur if events and prior research were presented out of context (Neuman, 2006). The context review provided the contextual framework for understanding the integration of creativity and MM as a construct within the broad perspective of creativity and MM research within the narrower perspective of the study related to MM's role in ascribed meanings to lived experiences of creating.

Contextual Limitations of Prior Research: Identified Gaps in the Literature

Horan (2009) said that differing types of meditation, varying instruments of measurement, and differing lengths of meditation experience in early research pertaining to the relationship between creativity and MM were some of the factors that led to

inconclusive results. Lebuda et al. (2015) conducted a meta-analysis that suggested that creativity depended on MM. According to Lebuda et al., their limitations were that data was from past research so they were unable to analyze relationships of all possible moderators, there were a small number of studies analyzed, and there were some difficulties in differentiating the levels, aspects, and types of creativity linked to MM. Capurso et al. (2014) identified a gap in regard to whether MM had a longitudinal effect on creativity. Research on MM and creativity together has been more quantitative. There has been little to no qualitative research on the topics of MM and creativity together; therefore, an identified gap existed for a more qualitative exploration.

Conclusion

The literature presented in chapter 2 discussed creativity, MM, and past and more current research in regard to the role of MM as it pertained to creativity. Horan (2009) said that MM and creating were neuropsychologically identical and offered an explanation to the hypothesis that MM enhanced creativity. Langer (2014) considered mindfulness and creativity to be the same and used both terms to describe the same state and construct. Langer's research indicated that MM increased creativity. Several studies presented in the literature review supported that MM played an integral role in enhancing creativity.

Summary

Creating has been considered by educators to be the highest level of cognitive intellect (Rich et al., 2014; Svinicki & McKeachie, 2011). Sternberg (2012) said that

being creative was an open, aware, mindful, and novel attitude toward life that developed into a habit. Kabat-Zinn (1994) researched applied MM practices that led to the development of successful treatment interventions designed to relieve stress, increase a sense of wellbeing, and promote learning.

Langer (2014) treated MM and creativity as synonyms, which upheld the Horan (2009) view that MM and creating were regulated by the same neuropsychological process. Horan (2009) offered a conceptual framework, based primarily on EEG studies, regarding MM's neuropsychological link to creativity. Horan (2009) explained that MM worked as a primer through neuroplasticity to create neural pathways that promoted creativity. Colzato et al. (2012; 2014) supported that MM, especially OM, positively influenced creativity through its weak top-down bias that effected the creative processes of divergent thinking (i.e., insight and inspiration). Lebuda et al. (2015) suggested that creativity depended on mindfulness, and according to Sternberg (2012), being creative was having a mindful attitude toward life.

Felder et al. (2014) said that the origin of phenomenology, which was developed by Husserl, was mindfulness. Felder et al. credited Husserl for bringing eastern mindfulness to the western world. Felder et al. said that Husserl's student, Heidegger, titled his work on reflective phenomenology as mindfulness. Felder et al. (2014) said that mindfulness was at the core of existential phenomenology and humanistic psychology.

With little to no qualitative inquiry regarding the topics of MM and creativity together and the role MM plays in the experience of creating, gaps in the literature were

identified. The need for qualitative exploration was addressed through the phenomenological exploration into MM and its role in lived experiences of creating. In chapter 3, the methodological orientation of this study is described.

Chapter 3: Research Method

The purpose of this study was to enrich findings regarding MM's role in increased creativity by conducting a phenomenological exploration into the ascribed meanings of lived experiences of creating for individuals who practice MM. Therefore, the goal was to further understand MM's role and gain insight and a deeper realization into how MM practitioners felt about and ascribed meaning to lived experiences regarding creating. The methodology discussed in this chapter was organized in the following sections: rationale and design, researcher's role, methodology (i.e., appropriateness of the design, participant recruitment and selection, sampling strategy, instrumentation [mandala task, interview set-up and questions], and data collection, selection, and data analysis plan), trustworthiness issues, ethics, and a summary.

Qualitative Rationale and Design

There are five common approaches to qualitative inquiry; phenomenological, narrative, grounded theory, ethnographic, and case study (Creswell, 2013). For this qualitative study, a pragmatic approach was considered as fitting. The philosophical assumption of pragmatism viewed research as something that could occur in several contexts and allowed flexibility in choosing the best method to reach a solution (Creswell, 2009). Using a pragmatic approach gave me the freedom to choose among methods, designs, and procedures to find what best fit the study. According to Neubert and Reich (2006), pragmatism was considered to be a source of social constructivism or interpretivism. According to Creswell (2013), the interpretive nature of qualitative

research stemmed from the worldview of social constructivism or interpretivism, which was that individuals constructed their own, unique understanding, meaning, and knowledge of the world through their experiences and their reflections of those experiences (Brinkmann & Kvale, 2005; Soukup, 2012). Qualitative inquiry was exploratory and allowed me to delve deeply into the subjective experiences and associated meanings of individuals to better understand phenomena.

Research Questions

In qualitative inquiry, one or more research questions typically guide the researcher's choice in design. This study was designed to inquire into the meanings ascribed to experiences of creating for individuals who practice MM. The main research question was followed by three closely related questions.

RQ1: What is the subjective meaning of the experience of creating for MM practitioners?

RQ2: What is the experience of creating like for individuals who practice MM?

RQ3: How do MM practitioners feel about the experience?

RQ4: Is there anything reminiscent about the experience of creating for these individuals?

The study's intended focus was the phenomenon of creating within the experiential context of MM practitioners.

Phenomenological Approach

There existed a gap in the literature regarding what experiences of creating are like for individuals who practice MM. As an exploration of an experience, the study used a qualitative design that was phenomenological in nature. A phenomenological approach

to qualitative inquiry was best suited for a study that described the common meanings of lived experiences of the same phenomenon (Banfield & Burgess, 2013; Creswell, 2013; Julmi & Scherm, 2015; Nelson & Rawlings, 2007; 2009). To gain meaning, Creswell (2013) recommended using a phenomenological approach to allow for a deeper understanding of an experience.

DeRobertis (2014) used Giorgi's method of descriptive phenomenology to explore lived experiences of being creative as a child for adults, and Nelson and Rawlings (2007; 2009), explored lived experiences of creating for artists. According to Felder et al. (2014), Husserl was the first to bring eastern mindfulness to the western world through his development of phenomenology. Lutz et al. (2015) developed a neurophenomenological matrix to address the transcendental nature of contemplative sciences. Giorgi (2009) developed a descriptive phenomenological method based on Husserl's transcendental phenomenology.

With the purpose of this inquiry being to explore creative experiences for individuals who are practitioners of MM, I chose a modified Husserlian method of descriptive, transcendental phenomenology. Giorgi (2009) looked to compliment and enrich the natural science approach of quantitative psychological analysis with the human science of phenomenology. Giorgi (2009) explained that, "It is the experienced as experienced that interests phenomenology," (p. 69).

Researcher's Role

In the tradition of qualitative research, the researcher's role embodied the concept of the researcher being an instrument of the study (Creswell, 2013). Qualitative research recognized that the researcher's philosophical lens or worldview drove the subjective nature of the researcher's interpretive framework, which underlies the concept of the researcher being an instrument. The methodology of qualitative research was exploratory, inductive, emergent, and was shaped by the actual experiences of the researcher as the data were collected and interpreted (Creswell, 2013; Giorgi, 2009).

According to Giorgi (2009), in using descriptive, transcendental phenomenology, the researcher's role as an instrument included an attitudinal shift to a heightened state of present awareness and alignment of consciousness, which was attained through MM in a similar fashion. Epoché was used to bring personal biases into the researcher's awareness and set aside, which allowed the researcher to view everything as new and facilitated suspension of judgment and naturally occurring free imagination (Giorgi, 2009).

Researcher Bias

Giorgi (2009) stated that through a shift in attitude that adopted present moment awareness and suspension of judgment, researchers could easily discern past experiences, and any judgments about them, from new experiences. Therefore, shifting to Husserl's transcendental phenomenological state served to aid researchers in addressing their biases. Furthermore, in using this method of phenomenology, bracketing assisted researchers in becoming aware of any biases that they might have. Being conscious of

bias was important so that whatever the bias might be, it could be accepted as possibly having an influence on the present experience, event, or object of interest. Giorgi (2009) used bracketing of researchers' past experiences, judgments, and/or knowledge about events or lived experiences being studied, which allowed descriptions of experiences from participants to be seen as fresh and reduced researchers' biases through awareness.

Rationale

The development of this study from conception of topic onward has been a synergetic process of personal and scholarly unfolding. As a creative, the term used to describe highly creative individuals, my initial research passion of interest, more than 20 years ago as an undergraduate, was creativity. More specifically, in discovering how to unlock and open the connection to the creative force that is available to us all, which has led me to this study.

My introduction to Ellen Langer's mindfulness intrigued me as her research on MM was touted to be the bridge between psychology's schools of thought (Demick, 2000), and then I discovered Horan's theoretical investigation that neuropsychologically linked MM to creativity. Having a pragmatic inclination as well as a love for experimentation, I leaned toward a mixed methods design; however, research moved quickly and the quantitative portion of my mixed methods plan had been investigated in a flurry of mindfulness/creativity research.

Quantitative investigations showing MM as a conduit for creativity served to fill the gap in the literature that necessitated conducting an experiment. I identified that a gap

existed in qualitative inquiry as, to the best of my knowledge, the topics of MM and creativity had not been explored together. Therefore, I could focus solely on deeply exploring my topic through phenomenology, which I was immensely grateful for.

MM is a natural practice for me as I experience life, as much as possible, in the present moment. I trust that ultimately, all is well, accept things as they are, and adjust accordingly. Listening to guided meditations offered by UCSD's Center for Mindfulness were extremely helpful in using MM on a daily basis for focus, alignment, clarity, and creativity. A book that I co-authored in 2012 is currently being used as a text book for a masters level mindfulness course for professionals at a main stream university, and I have recently developed my own guided MM practices for the International School of Healing Arts in San Diego where, shortly after conducting this study, I became the creative and academic director.

As a phenomenological researcher, I addressed bias by embracing a transcendental phenomenological attitude through MM practice at every juncture of methodology. To immerse myself in the study, I experienced, as closely as possible, the same mandala coloring experience provided to participants. Therefore, prior to enlisting voluntary participants, I colored in a mandala directly after practicing MM. I waited one day, assumed a transcendental phenomenological attitude through MM, descriptively answered the interview questions in writing, and set them aside.

Methodology

Appropriateness of the Phenomenological Research Method

The nature of qualitative inquiry is interpretive, meaning that knowledge was viewed as co-constructed, and as both a creator of the study and a primary research tool, the researcher cannot be separated from a study's concept to its data collection, analysis and interpretation (Creswell, 2013). A phenomenological approach to qualitative inquiry described the common meanings of usually more than one persons' lived experiences of the same phenomenon (Banfield & Burgess, 2013; Creswell, 2013). Furthermore, the phenomenological approach allowed researchers to cluster and reduce individual experiences of the phenomenon into a description of the universal essence of the experience.

Sampling and Recruitment

Unlike more quantitative designs where a large sample size is important in determining such things as statistical significance and generalizability, qualitative inquiry looks toward a purposive sample that can give insight into meanings ascribed to phenomena. Sample size is reflective of the depth of data that can be obtained by the researcher through prolonged and persistent participant engagement and observation (Onwuegbuzie & Leech, 2007a). In other words, the sample size for a more qualitative study was dependent on the richness, abundance, quality, and thickness of the words or voices of participants and observations that made up a participant's truth space, or participants' collective voice and truth space (Onwuegbuzie & Leech, 2007a).

Onwuegbuzie and Leech (2007a) said that the concept of sample was based on the sets of data gleaned from each participant whereby each set was a sample unit that

contributed to the whole. For example, interview data provided words and observations; however, enough words were needed to allow for voices to be captured (Onwuegbuzie & Leech, 2007a). In addition, enough observed body language, behaviors, and gestures were needed for participants' truth spaces to be revealed and understood.

A more common and general way to describe capturing enough data to reach participants' truth spaces was reaching a sufficient level of saturation (Onwuegbuzie & Leech, 2007). The goal then, according to Onwuegbuzie and Leech (2007a), was for the researcher to be immersed with the participants in a prolonged and persistent fashion while collecting data to reach saturation. Thus, in qualitative research, it was important to select a sample size that could realistically reach data saturation, informational redundancy or theoretical saturation (Onwuegbuzie & Leech, 2007, p. 106).

Too large a sample decreased the likelihood of capturing an individual participant's voice and truth space, and too small a sample made achieving data saturation more difficult in qualitative designs that looked for common themes and the essence of an experience like phenomenology does (Onwuegbuzie & Leech, 2007; 2007a). Creswell (2013) suggested that the sample size for phenomenological studies should contain around three to ten participants. Giorgi (2009) recommended a sample of four to ten participants.

As all participants must have experienced the same phenomena, the phenomenological approach had the narrowest and most specific sample criteria of the qualitative methods (Creswell, 2013; Giorgi, 2009). I used criterion sampling, meaning

that my sample strategy was criteria driven by the phenomenological approach of the research questions. The criteria were:

- All of the participants were MM practitioners.
- They were at least 18 years of age.
- They understood participation was voluntary.
- They were willing to attend a meeting in San Diego and were available for a face-to-face interview.
- They detailed (colored) a mandala.
- They agreed to answer interview questions.
- They agreed to the interview being recorded.
- They agreed to be available for clarification and follow-up.
- They signed an agreement of informed consent to the above criteria.

Once institutional review board (IRB) permission was obtained, eight potential participants were asked by text, email, phone, or in person if they were willing to voluntarily take part in a study. Four responded affirmatively. Affirmative responders were initially informed through email that they would be participating in a voluntary study, and that informed consent would be obtained as well as consent to record the interview process for transcription purposes. Prospective participants were assured, as their participation would be voluntary, that they were free to drop out at any time. All participants were assured that their identity would be kept confidential and that any and all personal information would be destroyed within the appropriate time frame. As

expected, some participants were acquainted; therefore, I discussed with them that they would need to maintain confidentiality for other members of the group as well as for themselves. Out of the four affirmative responders, only three actually participated. The fourth cancelled at the last minute.

I interacted and engaged with participants in two separate meetings. Participants were informed at our first meeting, and were reminded at our second, that this study was voluntary and that they were completely free to withdraw from the study at any time. The first meeting was a comfortable group setting where after MM practice, I immersed myself with them in the experience of coloring a mandala for an extended time, which was approximately three hours. While coloring mandalas, I collected some observational data through field notes. Before participants left the exercise, I set up a time and a place of their choosing to meet with each of them individually.

The set appointments were for a face-to-face digitally recorded interviews, which were to take no more than 90 minutes. The interviews were semistructured with demographic questions phrased in a way to develop rapport while gleaning information followed by seven questions with prompts for clarifying and digging deeper into each participant's descriptions of experiences of creating. For the study, a sample size of three participants appeared adequate to achieve an appropriate level of saturation due to the unrushed and extended duration of our first meeting, having ample time set aside for interview appointments, and by developing rapport using trust building interview techniques to illicit rich, thick, and descriptive data.

Instrumentation

Mandala Coloring Experience

For the participants' task, a mandala was chosen because they are complex yet basic. Coloring them requires no prior artistic experience, and the act of coloring mandalas was used to exemplify a creative experience (Green & Young, 2015). An example of the mandala I used for this task can be found in appendix A.

Before beginning, participants were reminded that all participation was voluntary and that they were free to withdraw at any time. I set up the mandala coloring exercise to begin directly after a guided audio MM session. Each participant was provided with a set of artist grade markers and a sheet of white card stock with a mandala printed on it (Appendix A). Once participants had been given their mandala and markers, they were, as a group, given the opportunity to color it in with markers on their own.

Participants were given ample time for their task; however, completion was not necessary as they were allowed to take their mandala and their set of markers home with them. All participants completed their mandala. One participant completed two. Some field notes were taken by me as to the participants' affect and observed behaviors during the mandala coloring portion. All participants appeared focused and comfortable coloring; however, if any participant had appeared to be emotionally upset or distraught at any time during the coloring experience, I would have pulled that individual aside quietly and asked if he/she wanted to continue, if a break was needed, or if the need to withdraw from participating was felt.

Interview Setting and Questions

Directly after coloring their mandalas, an interview appointment was set up for each participant at their choice of location and time, preferably one or two days after the coloring experience. One to two days after the mandala experience was to optimize the Wallas (2014) incubation phase of creative processes discussed in chapter 2. Semistructured, face-to-face interviews were conducted individually by me, and the entire process for each participant lasted between 45 and 90 minutes.

The interview questions located in appendix B were used as a guide. They were open ended to allow for flexibility and included prompts. Before the questions were asked, participants were reminded that all participation was voluntary and that they were free to withdraw at any time. All participants appeared at ease; however, if during the interview, a participant had appeared emotionally upset or distraught, I would have asked if the participant wanted to continue, needed a break, or wanted to withdraw.

Data Collection Sources and Procedures

I was an instrument of the study. As the goal of phenomenology was to qualitatively explore lived experiences, interview data were a major component in the study. In using this method, my style of interviewing needed to be co-creatively oriented to capture the emerging essence of the lived experience.

I embraced the idea of my self being an instrument by continually reflecting on how contextual factors might have been influencing the interaction to gain the clearest and most meaningful collaboration with participants. The interviews were semistructured

with planned questions being used as a guide rather than as something rigid to be adhered to. The first few questions asked for demographic information and were designed to build rapport. To assume a transcendental phenomenological attitude, I privately practiced MM before each interview.

All face-to-face interview data were obtained with participants' permission to be digitally recorded, which allowed for transcription and an in depth review of the emergent processes of phenomenology. Collected observational field notes taken during the coloring exercise were used for triangulation with the primary interview data. I had planned on either preparing all interview data for future transcription and finding a suitable voice to text application or a transcription service to assist me, or I considered structuring the raw, digitally recorded interview data using a process called C-TOC (Hauptmann, 2005), which would omit using a transcription service and therefore, omit the need to rigorously review the recordings and compare them to their transcription for accuracy. However, as there were only three participants, I was given the opportunity to transcribe by hand, which allowed me to be deeply immersed with the interview data.

I synthesized the transcribed data with my visual/auditory observations as to note emphasis or corresponding emotional responses that emerged during the interview process. I processed the data by hand rather than using qualitative data analysis (QDA) software (e. g., NVivo, Atlas). I transcribed the recorded data word for word into a Microsoft Word table to prepare for data transformation.

Data Analysis and Interpretation

I followed the steps of Giorgi's descriptive phenomenological method of data analysis; however, I integrated the Husserlian transcendental phenomenological approach of data analysis and interpretation that Giorgi (2009) presented. According to Giorgi, the transcendental phenomenological method was focused not only on describing the experience, object, or event, but also on how the researcher approached exploration and implemented data analysis and interpretation through assuming a transcendental phenomenological attitude, or a mindfulstate. My rationale for choosing descriptive, transcendental phenomenology was that the very nature of qualitative inquiry was interpretive, meaning that it viewed knowledge as co-constructed, and as both a creator of the study and a primary research tool, I could not be separated from data analysis and interpretation.

Giorgi (2009) developed his modified Husserlian method of phenomenology to better fit the human science of psychology and to allow for participants who were naïve to assuming a transcendental phenomenological attitude. However, in this study, participants are MM practitioners and they are familiar with attaining a state of mindfulness. Therefore, I used Giorgi's approach to descriptive phenomenology while fully embracing Husserl's purely phenomenological philosophy as an applied method of psychology.

Giorgi (2009) referred to setting the past aside as bracketing or transcendental reduction. Giorgi said that there was no need for the researcher to completely forget or

separate from previous experiences and that there was only bringing it into awareness while practicing epoché, or a suspension of judgment. Giorgi (2009) said that assuming a Husserlian transcendental phenomenological attitude meant to be fully open with attention focused on present moment awareness combined with the suspension of judgement through epoché. Mindfulness was fundamental to phenomenology. Felder et al. (2014) credited Husserl as having introduced mindfulness to the western world. According to Felder et al., mindfulness was found at the core of existential-phenomenology and humanistic psychology.

I had experienced the mandala exercise, answered the interview questions a day later, and set them aside prior to enlisting participants. I employed bracketing through reflexive journaling and described my personal, past experiences with MM and creating. As a phenomenological researcher, while preparing to conduct data analysis and representation, I used breath awareness MM at each stage to achieve an open, present focused consciousness. I put any preconceived notions aside, and focused on the pure analysis of participants' descriptions, meanings, and feelings about the phenomenon.

Participants were MM practitioners that were familiar with assuming a transcendental phenomenological state of conscious awareness; therefore, I undertook every step of the phenomenological process mindfully to allow for a building of rapport during participants' introduction to the coloring task, and also for a dynamic, rich, and meaningful exchange with participants during the interview process. After data collection, in preparation for analysis, I listened to each interview and made notes

regarding anything that was hard to hear or needed clarifying. I contacted participants by phone and added provided input.

I carefully transcribed the audio recordings, one participant at a time, by repeatedly listening again and again to ensure accuracy. I determined participants' lived meanings or meaning units from the transcribed interview data and focused on textural examples or shapes of their experiences. Through the process of transformation, or phenomenological integration and synthesis, I looked at how the shapes of experiences regarding creating revealed themselves for each participant. By synthesizing participants' experiences of creating through their textual and textural descriptions, I focused on the overall shapes, themes and commonalities, which presented the descriptive structure of their lived experiences of creating.

Trustworthiness Issues and Ethics

Trustworthiness

Validation's importance in qualitative research required an understanding of the paradigmatic shift from post-positivism to postmodern social constructivism, whereby validation was hinged on researchers' credibility, understanding, and authenticity rather than the validity and reliability of tests, instruments, and methods of measurement (Creswell. 2013; Lincoln, Lynham, & Guba, 2011). The terms validity and reliability used in more quantitative research methods were considered too rigid, judgmental, and unnatural to the richness in understanding that qualitative inquiry offered; therefore, validity and reliability were typically referred to as issues of researcher trustworthiness

(e. g., dependability, credibility, transferability, and confirmability) (Lasch et al., 2010). These more qualitative terminologies were considered by Lincoln et al. (2011) and Creswell (2013) to be better suited to naturalistic research. Lincoln et al. (2011) said that the qualitative research field has continued to mature in methodology and epistemology, and the importance of understanding validation of the research process had deepened along with its sophistication.

Creswell (2013) discussed that researchers' credibility and authenticity could be thought of as substantive validity, which was a self-reflective measure that showed throughout the study that researchers understood the topics they were researching, other sources on the topics, and understood written processes of documentation in which researchers as interpreters, co-created through interactions with the data and subject matter. Therefore, trustworthiness of researchers' interpretations of meanings was built through persuasive, knowledgeable, and compelling documentation. Creswell (2013) viewed validation in qualitative research as, "an attempt to assess the accuracy of the findings as best described by the researcher and the participants. This view also suggested that any report of research is a representation by the author," (pp. 249, 250).

In order to address concerns of trustworthiness, I presented documentation regarding knowledge on topics. I presented details regarding credibility, dependability, transferability, and confirmability to show how rigor was established. I addressed trustworthiness as follows:

- Credibility involves the researcher seeking confidence in the truth of the findings and consistency between data collected, interpretations of descriptions, and the lived experiences participants related (Creswell, 2013). I used multiple sources of descriptive data for triangulation purposes, identified biases through bracketing of past experiences, beliefs or opinions by having interview data reviewed by my chair through conferences, and by using member checking. I employed member checking by contacting each participant via telephone after transcription to ask if I captured descriptions correctly prior to data analysis. All participants agreed with my transcriptions being correct representations of their interviews.
- Dependability is mainly about demonstrating consistency in the findings to assess reliability (Creswell, 2013). I had my chair conduct an audit trial by checking to see if the data supported my interpretations, findings, and conclusions.
- Transferability looks to the researcher to provide enough information through detailed descriptions of the study's setting to see if it would be applicable in other settings. I described the participants and the setting in a highly detailed manner with descriptions that were intensely rich.
- Confirmability ensures that the findings are based upon the participants' descriptions of their lived experiences and ideas and not the researcher's biased version (Creswell, 2013). I clarified my biases in the study so that my position would be understood by the reader.

Ethics

According to Janesick (2010), building rapport and developing a trusting relationship with participants was important. Therefore, to address ethical concerns, I held an informal meeting prior to beginning the study and went over the form that provided and obtained informed consent (appendix C). During our meeting, participants were informed verbally and in writing of the purpose of the study, which was to further understand MM's role in increased creativity and performance, and to gain insight and a deeper realization into how they, as MM practitioners, feel about and ascribe meaning to lived experiences of creating.

I explained verbally, and through written informed consent, that their identity would be kept confidential, the time it should take to complete the study, and that their interviews would be recorded to assure that I do not miss or accidentally misconstrue their words. They were also informed that observational data (field notes) may be collected by me during the mandala coloring task, and descriptions of their posture, behavior, and affect could be obtained. They were informed that I may also be taking notes during the interview process to supplement audio recordings. Furthermore, I reminded them at every juncture of the study that their identity was confidential and that their participation was voluntary. In addition, I made participants aware that I would keep any part of participants' responses completely undisclosed at their request.

Summary

This chapter discussed the worldview, philosophical assumptions, and the rationale for choosing descriptive, transcendental phenomenology as the methodological

design for this qualitative study. Participants were MM practitioners who were familiar with assuming a transcendental phenomenological state of conscious awareness. Therefore, descriptive, transcendental phenomenology was appropriate to explore three MM practitioners' described meanings of lived experiences of creating. Furthermore, with MM serving as the conduit for present moment consciousness and the suspension of judgment, assuming a transcendental attitude was discussed as a means to address my biases. Criterion based purposive sampling was used to identify participants. Trustworthiness of the data and ethical considerations for this study were also discussed. The results are presented in chapter 4.

Chapter 4: Results

The study's purpose was to explore lived experiences of creating for MM practitioners. I used descriptive, transcendental phenomenology and revealed the structural essence of MM practitioners' lived experiences regarding creating. I chose the method of descriptive, transcendental phenomenology, synthesized research, concepts, models, and theories presented in the literature review, and with an integral lens, interpreted participants' lived experiences regarding creating.

Qualitative Exploration

In qualitative research, the philosophical lens or worldview drives the subjective nature of researchers' interpretive framework (Creswell, 2013). Creswell (2013) and Giorgi (2009) said that the methodology of qualitative research was exploratory, inductive, intuitive, emergent, and shaped by the actual experiences of researchers as the data were collected and interpreted. Thus, the nature of qualitative inquiry underlies the concept of my role as a research instrument.

Methodology Rationale

My rationale for choosing Husserlian descriptive phenomenology over interpretive phenomenology was because of the overall interpretive and intuitive nature of qualitative inquiry. Qualitative inquiry viewed knowledge as co-constructed (Creswell, 2013; Giorgi, 2009; Sloan & Bowe, 2014), and as both creator of the study and primary research tool, I could not be separated from data collection, analysis, and interpretation. I wanted to base findings on participants' descriptions and be clear on their ascribed

meanings through deeper participant inquiry rather than use interpretative phenomenology, which can base findings on researchers' intuitive interpretations of participants' descriptions (Giorgi, 2009).

My role as researcher embodied the concept of being an instrument of the study. In using descriptive, transcendental phenomenology, my role as an instrument included alignment of consciousness and an attitudinal shift to a heightened state of present awareness. Through a shift in attitude that adopted present moment awareness and suspension of judgment, I was able to discern past experiences, and any judgments about them, from new experiences. Being conscious of bias was important so that whatever my biases might be, they could be accepted as possibly having an influence on the present experience, event, or object of interest. The descriptive, transcendental method of phenomenology used the suspension of judgment, or epoché, and observance of a mindful state, or transcendental attitude of phenomenology, as a means to address biases. I used epoché to bring personal biases into my awareness and set them aside, which allowed me to view everything as new, suspend judgment, and free my imagination.

Shifting to Husserl's transcendental phenomenological attitude served to aid me in addressing my biases. MM served as a conduit to the present moment consciousness of a mindful state of awareness, or transcendental attitude. As both participants and I were MM practitioners who were familiar with assuming mindful or transcendental phenomenological states of conscious awareness, I decided that descriptive, transcendental phenomenology was a good fit.

Prior to enlisting participants, I practiced MM and experienced coloring in a mandala for the first time ever. One day later, I answered my interview questions in writing. Bracketing assisted me in becoming aware of my biases, which allowed descriptions of my experiences to be seen as fresh. I noted my most apparent biases, which were that as a creative, I assumed that everyone had experienced flow at some point in their life, and as a practitioner of MM, I assumed that participants, being MM practitioners, had experienced transcendence on a regular basis. Having knowledge of MM's role in enhancing creativity and knowing that MM and creativity shared the same neuropsychological processes, affected my perception and were potential biases.

With phenomenology, the main criterion was that participants had all experienced the phenomenon being studied (Creswell, 2013). The main research question was followed by three closely related questions that were added for depth. The research questions were:

RQ1: What is the subjective meaning of the experience of creating for MM practitioners?

RQ2: What is the experience of creating like for individuals who practice MM?

RQ3: How do MM practitioners feel about the experience?

RQ4: Is there anything reminiscent about the experience of creating for these individuals?

Setting

As the level of creative experience was an unknown, participants were given a task, which was to create a mandala, by coloring it in, to serve as a lived experience for this study. Furthermore, participants engaged in practicing MM prior to the mandala task

to facilitate their being in mindful states. Both the MM practice and coloring the mandala were group exercises.

The study was designed to be held in a small town in north central Arkansas. During the IRB approval process, it was changed to San Diego, CA. On September 15, 2017, IRB approval #09-15-17-0334641was obtained. A change in procedure (location) was submitted October 16, 2017, and the approval for the change was received October 27, 2017 from the IRB.

At an event held by friends on October 28, 2017, four potential voluntary participants were identified. Three showed interest and provided me with their contact information. Two prospective voluntary participants whom I knew through UCSD mindfulness were called and both declined due to unavailability. Two prospective voluntary participants that I had meditated with previously were called, and one agreed to be a participant. The mandala coloring experience was scheduled to be held November 6, 2017. Emails were sent out November 3, 2017 to the four voluntary participants who had agreed, and three responded and became participants.

The Mandala Coloring Experience

Participants agreed to meet at a San Diego business location that was closed to the public on Mondays, which was the day it was held. The room was large enough for eight to ten people with a small dining sized table and cushioned chairs. There was plenty of space and a rug on the floor that enabled participants to lie down if they wished during the meditation.

The mandala that participants were given to color can be found in appendix A. To facilitate everyone being in a mindful state prior to the mandala exercise, I played a guided audio meditation from UCSD's Center on Mindfulness. Participants were also furnished with a set of artist grade markers, which they got to keep.

Demographics

To take part in the study, participants signed informed consent forms and confirmed that they met the study's criteria. The criteria were that they were currently practicing MM, over 18 years of age, would attend a group mandala exercise at a San Diego location for approximately two hours, and would be available for an interview appointment lasting 60-90 minutes at a location and time of their choice one or two days after the mandala coloring task. Furthermore, participants agreed to the interview being recorded, would provide any follow-up information needed after the interview by phone, text, or email, and that it was understood that participation was voluntary and confidential.

All three participants were between ages 55 and 61 years and were living in Southern California. The mandala task was held in San Diego and the interviews were held at participants' choices of locations. To develop rapport, prior to recording each individual interview, I thanked each of them for participating. I asked participants how they were doing and after listening to their responses, I informed them again that the interviews would be recorded. They were reminded of the voluntary and confidential nature of their participation and that if there was anything that they did not want to be

used in the study that it would be omitted upon request. I asked if there were any questions or anything they wanted to share before recording started. At the beginning of recorded interviews, each participant was asked a total of five demographic questions; three regarding personal information and two regarding MM practice. The questions were:

1. How would you describe your level of education?
2. How would you describe your gender?
3. How would you describe your ethnic-cultural background?
4. How long have you been practicing MM?
5. How would you describe the way you practice MM?

Interviews were held in person and were recorded. They were held privately, lasted for 45 to 90 minutes, and follow up clarification in regard to the interviews were held over the phone a few days after. Member checking was done on the telephone with me reading the corresponding transcribed interview data to each participant. All participants said that the transcriptions were an accurate representation of their interviews. Each participant was assured that any identifying information would be omitted in the final write up. A pseudonym was assigned to each participant.

Profiles

P1 was a male who described himself as macho. He had some college and was a self-employed auto mechanic who also worked in construction and renovation. He

described himself as a hardworking, white, western European-American who was raised in the southern United States.

P1 has been practicing MM daily for three months through breathing, self-awareness techniques, and body or breath-awareness meditation. P1 defined MM as a way to open to present moment awareness that makes him feel more stable and calm. P1 stated, “I feel centered and more open,” and he described his experience of MM as being relaxing and enjoyable.

P2 was a female who described herself as strong. She said that she was knowledgeable but had no formal level of higher education. P2 described herself as a self-taught artist, interior designer, and costume designer who considered herself to be both highly intuitive and creative. She described her culture and ethnicity as being at the top of the food chain, and she was raised in an upper middleclass area in southern California.

P2 has practiced MM as long as she can remember, and she stated, “I feel like I live outside of time, I’m in the present moment a lot, and everything’s new and exciting to me. When I learned about MM last year, I realized I’ve been doing it all my life kind of naturally.” P2 described her MM practice as being often throughtout every day. She practices when she needs to calm herself by getting in touch with her body. She sits quietly, focuses on breathing, and brings herself into present moment awareness. P2 stated, “MM quiets my mind and gets me in touch with loving feelings and helps me to be objective.” Rejuvenated, relaxed, and calm were how MM made her feel. P2

described her experience of MM in the group setting as, “I took myself out of the group and went within. I felt insightful and curious.”

P3 described herself as fully female. She had a more technical education and studied drama, costume design, and dressmaking. P3 described herself as very open to learning, and she considers herself to be spiritual, intelligent, and creative. P3 described her ethnic culture as being strange and said that she liked being strange. She said that she was of western European descent and was raised in an upper class family in Mexico.

P3 has been practicing MM, on and off, over a span of 30 years and has been practicing MM consistently for two years. P3 practices MM often throughout the day and stated, “I bring myself to the now with my breathing. I pay attention and am very focused on what I’m doing.” P3 defined MM as when her spirit and body are coming together. She said that MM made her body feel relaxed. P3 stated, “I can filter my thoughts and am aware of them, and I can let them go. It helps me to reevaluate a lot of things. It’s relaxing, I’m in touch with my body, and put my thoughts aside.” Her experiences with MM were also described as enjoyable.

Data Collection

Data were primarily collected through a 45-90 minute face-to-face interview for each participant on November 7th and 8th 2017, at a location and time of their choosing one to two days after the mandala coloring experience. In holding the interviews one to two days after the experience, I hoped to optimize the incubation phase of the creative

process from Wallas (2014) that occured during sleep. I recorded the interviews as videos using my laptop with only me in the picture.

The semistructured interviews, which are in Appendix B, consisted of five demographic questions, three regarding personal information, and two regarding MM practice, three interview questions describing MM, and six interview questions describing the experience of creating. The nine open ended interview questions were:

1. How would you define MM?
2. How would you describe the way being a MM practitioner makes you feel?
3. How would you describe your experience of the breath awareness meditation?
4. How would you describe your coloring experience?
5. How would you describe the way coloring made you feel?
6. How would you characterize the meaning of your coloring experience?
7. How would you describe any changes to your state of awareness or any bodily sensations experienced while you were coloring?
8. How would you describe other experiences that seem similar to your coloring the mandala?
9. How would you describe the way ____ made you feel? How would you characterize the meaning of ____? For each experience given.

Prior to each interview, I practiced MM using breath awareness, and I did the same prior to listening, transcribing, and at each step of analyzing the data to assume a mindful or transcendental phenomenological state of conscious awareness. Prior to

officially beginning each recorded interview, I individually thanked them for participating, I asked how they were doing, and I reminded each participant of the voluntary and confidential nature of the study. I reminded them that if there was anything that they did not want to be used in the study that it would be omitted upon request. I asked each of them if there were any questions or anything they wanted to share before recording started.

I initially listened to P1 and P2's interviews the day after the mandala exercise, which was the same day that those interviews were conducted. I listened to each one three times. The first time, I listened all the way through, and during the second, I engaged in reflective journaling. The third time, I wrote down key phrases and any questions, which I later asked in follow up phone calls.

P3's interview was two days after the mandala exercise. I listened to it in the same fashion on the same day it was conducted. Three days after the mandala exercise on November 9, 2017, I contacted all three participants, one at a time. To get clarification, I asked the questions I had jotted down, and I wrote down their answers. The 2017 fall quarter ended, and I requested a leave of absence for the 2017 winter quarter for personal reasons.

I made three tables in Word. One was for participants' answers to basic demographic questions. The second was for answers to MM demographics, definitions, feelings, and experiences. The third was for participants' answers to questions regarding the mandala coloring experience. I entered key phrases I had noted and the answers to

clarifying questions that I had obtained on the phone for each participant into the corresponding tables.

I transcribed participants' interviews by hand, one at a time, by listening to the videos over and over and over again. I added the transcribed data to the appropriate questions within the corresponding tables. As I immersed myself in the data through the transcription process, the synthesis of their descriptions began taking shape. The most apparent commonalities, at this early stage, were the participants' notice and feelings about color, and their descriptions of feeling like they did as children.

Spring quarter began and on February 28 to March 2, 2018, I telephoned each participant and read aloud what I had transcribed as a form of member checking. I also asked for some clarification from P2, which was added. All three participants indicated that the transcriptions were accurate representations of their interviews.

Data Analysis

A Husserlian phenomenological approach to data analysis looked toward revealing the overall or whole essence of the lived experience being explored (Giorgi, 2009). Furthermore, according to Giorgi (2009), it supported the empirical evidence gleaned through qualitative inquiry by using eidetic science reduction, which through detailed, vivid descriptive imagery identified the basic components and shapes of an experience. Using descriptive analysis focused on participants' descriptions and if something was unclear, more descriptive data was collected rather than trying to intuitively interpret ambiguities. Thus, descriptive analysis strived to understand ascribed

meanings and depended purely upon the descriptions presented. In other words, although ambiguities presented themselves in both interpretive and descriptive analysis, in using descriptive analysis, I made note of vague features and attempted to clarify them through further participant inquiry rather than speculating meanings of ambiguous data through interpretive analysis.

The descriptive phenomenological approach to data analysis included three fundamental, concrete steps, which were to read the participants' descriptions as a whole, determine lived meanings or units of meaning, and transform meaning units into psychological expressions for each participant. Using eidetic reduction, descriptive data were broken down into meaning units, and with my role as a primary research tool, this process was highly influenced by my attitude. This was why assuming a mindful or transcendental attitude during the process of discerning meaning units and transforming the data was important. Once transformation was completed, it was determined through comparison and contrast whether the shape of the transformed meaning units for each participant could form a single psychological structure.

In contrasting and comparing, the differences between participants' psychological meanings were determined to be intrastructural or interstructural. Along a spectrum, differences that can be designated to depict lived experiences of the phenomenon are intrastructural, and differences that are too diverse to be designated are interstructural (Giorgi, 2009). Hence, the psychological structure unified participants' varying facts and diverse details as essential constituents of the phenomenon being described.

Participants' interviews were recorded on my laptop and were transcribed by hand, which allowed my immersion with the data. The transcribed interview data of each participant were analyzed in the same way. For the first two steps, I practiced MM to assume a mindful or sensitive state of awareness and proceeded with reading each participant's transcribed data from beginning to end to feel the general sense of the descriptions and comprehend them as a whole. During the second step, I marked the meaning units of the transcribed interview and copied and pasted them into a Word table. Putting the transcribed descriptions into meaning units prepared them for transformation. Most of the transcribed descriptions qualified as meaning units, and the table's columns streamlined the data and made it easier to see. After viewing the described meanings as a whole, I again focused on one participant at a time, listed their individual meaning units, and prepared for transformation of the data.

At the juncture of transformation, assuming a transcendental phenomenological state of conscious awareness was imperative as the third step of analysis was the most intuitively intensive. I had already felt the shape of the data emerging through the transcription process and realized that interrogating and re-exploring the raw data would greatly develop the psychological potentiality of the transformation process. To increase dimensionality, I went back to the recorded interviews and listened to the tone of the participants' voices. I was sensitive to the attitudes they conveyed in conjunction with the meanings that the experiences of creating held for them. The first step of transformation

was to convert the meaning units from first person to third person perspectives for each participant.

P1 Meaning Units

P1 described MM as being a way to open to present moment awareness. P1 feels more stable and open, calmer, centered, and relaxed when practicing MM. Practicing MM is enjoyable for P1.

P1 described the mandala coloring task as a creative experience. He put colors together and blended them to please the eye. Coloring the mandala made him feel younger and creative. He said that he was more creative when he was younger. P1 stated, "As we get older we get rutted and don't have the pleasure of being as creative." In describing his mandala coloring experience, P1 said that he felt like he went back in time to childhood when his imagination was a lot more vivid.

P1 described the meaning of the mandala coloring experience as self-expression. P1 stated, "It's hard to describe. Everyone has their own personality. It can be negative or positive." He tries to stay inside himself to see more of the positive.

When asked if he experienced any bodily changes or a change in awareness during the Mandala task, P1 said that in the group setting, he was sometimes paying attention to the other participants. P1 said that he would be distracted by the other participants, then he would forget about them and feel really focused on the colors. He added that during the group MM exercise, he was better able to focus within.

P1 said that there was nothing similar to his experience of creating a mandala nor did it remind him of anything that he had ever experienced before. P1 repeated that he was really focusing on color and stated, “It’s hard to relate… dark to light… sunrise to sunset. I stayed in the present, and it was a totally new experience.” P1 said that if he had ever felt this way, it had been a really long time ago, and he did not remember it. While nodding, yes, P1 said that when he was coloring the mandala, he felt more productive and more imaginative than he remebered.

P2 Meaning Units

P2 describe practicing MM as calming. MM quiets her mind, gets her in touch with loving feelings, and helps her to be objective. P2 goes within and feels rejuvenated, relaxed, insightful, and curious when practicing MM.

When describing her mandala coloring experience, P2 stated, “This is the part I love. It’s why I do it all the time.” She feels energized and relaxed at the same time. P2 said that creating the mandala made her think about how much she loves exploring new colors. P2 forgot about everything and everyone around her during her mandala creating experience. P2 said that she felt at ease, immersed, and fully engaged.

In regard to the meanings experiencing creating a mandala had for her, P2 said that she feels happy, good, complete, and creating means everything to her. When asked if she felt any bodily changes or changes in awareness, P2 stated, “Well, I forgot anything and everything, I could do it forever.” P2 said that creating makes her explore her inner self.

P2 said that her experience of the mandala task was similar to and reminiscent of riding horses, being with animals and in nature, flying in a fighter jet, swinging, and anytime that she was creating something. P2 feels free when riding horses, meaning she is at one with the horse and away from everything. In Nature, P2 feels peaceful and happy, meaning she feels it is where she should be, and she feels like we all need to be in nature. In regard to flying, P2 said that she was definitely free with not a care in the world, meaning she felt complete freedom and happiness. Swinging made her feel free like a child. P2 said that swinging at the park was something that she does now and that it reminded her of swinging on the rings at school when she was a child. Memories of swinging from her childhood meant feeling free with no worries.

P3 Meaning Units

P3 described MM as spirit and body coming together. When practicing MM, her body is relaxed, and she can filter her thoughts. P3 is aware of her thoughts, and she can let them go. P3 said that she enjoys practicing MM, and it helps her reevaluate a lot of things. She repeated that practicing MM feels relaxing, she feels in touch with her body, and puts her thoughts aside.

When asked about her mandala coloring experience, P3 responded by saying that she loves colors. P3 said that colors have an important role, and everything has a color. P3 stated, “Colors can bring you to a memory or a feeling.” P3 described feeling relaxed, happy, and peaceful coloring the mandala. She enjoyed making decisions on combinations of colors.

When asked about the meaning of her mandala experience, P3 said that she made the decision to start from the center and then moved outwards. P3 stated, “I started thinking, is that how I live my life? From the center outwards? Or do I go in a line from this to that?” P3 said she realized that in life she starts from the center and works outward.

When asked if she had felt any bodily changes or changes in awareness during the mandala task, P3 said that she felt a deeper level of awareness when she started working with purple that took her back to her childhood. P3 stated, “I think it makes me aware that we are artistic, but we don’t let ourselves be free to express ourselves or what we really want. We hold back and limit ourselves through structural combinations that we learned, or by keeping ourselves in certain patterns.” P3 looked down for a moment, looked back up, made eye contact with me, and stated, “By drawing that mandala, it gave me freedom, it gave me permission to explore colors, and wherever it would take me was always a surprise. How these colors were coming together was surprising, and the more I put into it, the more alive it became.”

P3 said that she thinks her experience of creating a mandala reminds her of everything she does. Her artistic side is what she likes most about herself. P3 likes to practice being artistic in everything that she does and wherever she is. P3 said that her intent is to be creative in everything she does. P3 gave examples of instances that were similar to her experience of the mandala task as being theatrical performance, costume

design, choreography, and everyday things like color coordinating what she's going to wear.

About everything she does, P3 said that she feels like it immediately goes to that creative area. She said that having creative intent helps her to loosen up and go with what is happening, "to go out there, explore and do." P3 stated, "So almost every day, it's an everyday thing for me." Costume designing makes P3 feel that she has a purpose. It feels like her way of expressing herself, her abilities, and her imagination.

P3 said that creating means a lot to her. She said that she thinks creating has a purpose for her, and P3 stated, "If I couldn't do it, I'd be depressed, or if I don't do it for a long time, I get depressed." She said that creating has something that lulls her, and she's passionate about it. Whatever P3 is creating is unique, and it is gratifying to see the end result. P3 said that she finds herself almost begging people to let her make things for them, and that she has asked, "Hey can I do that for you? I can do it." P3 admitted that at this point, she almost has a little bit of an addiction to creating, but she added that it is a good addiction. P3 feels that her addiction is a need to express herself.

Transformation in Process

Meaning units, or lived meanings, for individual participants were transformed in three separate Word tables. The transformed meaning units were placed in a single Word table. At this juncture, it was determined that the transformed meaning units for each participant appeared more heavily intrastructural than interstructural and could therefore

become a single structure. The transformed meaning units of each participant were put in another Word table where they were compared and contrasted for variance.

Giorgi (2009) said that the structure of the experience served to holistically understand how varying facts and diverse details can be unified as essential constituents of the phenomenon. There ended up being ten meaning units for each participant. From each meaning unit, a structure was formed for a participant called P, which was an ideal, meaning that P was representing all participants either as a single participant or plural participants. The descriptive structure of lived experiences of creating for MM practitioners P1, P2, and P3 was presented by paragraph in ten transformed meaning units.

Descriptive Structure of Experiences of Creating for P

For the most part, P is direct in describing demographics and their experiences. Ps' descriptions of their experiences have detail, and sometimes the descriptions are broad, untypical, vague, and abstract. When practicing MM, P experiences going within, seeing things as new, being in the present moment, and feeling relaxation and calmness. Letting thoughts float by, feeling curious, rejuvenated, and insightful are also descriptions of Ps' MM experiences.

P describes being intently focused on selecting colors and describes coloring the mandala as a creative experience. For P, colors are important and everything has color. P loves to explore new colors and blends them to make something beautiful. P was

pleasantly surprised by the results of coloring and that with effort, the mandala came alive.

Focus for P is attentive, intense, and full during coloring. The experience of creating allows P to freely express themselves and takes P back to their childhood. For the most part, childhood is when P feels imagination was more vivid and more freely expressed. Creating also makes P feel happy, good, complete, and like a child.

Ps' descriptions regarding experiencing an attentive, focused, rewarding, and present moment state when creating are indicative of an individual's awareness shifting into Csikszentmihályi's flow. For the most part, P is very familiar with creating and experiencing flow. In contrast, having a creative experience is less familiar, and experiencing flow is totally new for P. Descriptions regarding experiencing feelings of flow are consistent for P.

Often, Ps' descriptions of meanings regarding experiences of creating are for all of their experiences of creating rather than only for the mandala creating experience. Creating for P means feeling free, moving from the center outward, a need for self-expression, going within and forgetting everything and anything outside of oneself, being relaxed, and feeling energized. Experiences of creating lull and satisfy P.

P described a shift of awareness into flow during the creative experience of mandala coloring. P also described experiencing distraction, shifting out of flow, and then shifting back into flow. The shift of awareness into flow seemed to occur regardless of creative ability and experience or familiarity with creative flow. P's shifting into flow

for the first time ever seems related to practicing MM. P's distractibility and shift out of flow appears to be in relation to having less familiarity and experience with creating and MM.

P gave many descriptions regarding experiences of creating and of MM that have the same meaning. Descriptions for practicing MM that were similar to those used to describe creating are relaxing, enjoyable, rejuvenating, feeling open, going within, being in the present moment, an everyday habit, being free from thoughts, feeling curious and insightful, and seeing things anew. Descriptions for experiences of creating that were similar to those used to describe MM are relaxing, feeling energized, new, feeling open, an everyday thing, feeling free from worry, being imaginative, staying in the present moment, and going within or forgetting everything and anything outside of oneself.

When creating, P feels more imaginative, more open, more productive, and P feels the experience is new. The drive to create feels like pressure, and P is bursting with self-expression. P wants to create all the time, and the desire to create feels like an addiction to self-expression.

Ps' experiences that were reminiscent to creating a mandala varied greatly from everything, to noncreative, to nothing; however, the experiential factor linking all similar experiences is Csikszentmihályi's flow. Intense, pleasurable or euphoric and exhilarating experiences feel reminiscent or similar to experiences of creating. During these experiences that feel similar to experiences of creating, P feels a sense of freedom and remembers feelings from childhood.

Creating has a purpose, there is passion, and a deep need to express oneself, and P feels a drive and an addiction to creating, self-expression, and the desire to create. P feels gratification in seeing the end results of effort. For the most part, P describes living in the present moment. For P, MM is more than just a meditation practice, MM is a way to live life.

Emergence of Findings

According to Giorgi (2009), "Structures are obtained by examining the last column of transformed meaning units, and with the help of imaginative variation, determining which ones are truly essential for the phenomenon to present itself to a consciousness," (p. 200). The structural description for P as an ideal was not the last step. The structure gave the unified identification of the phenomenon as a whole, and it needed to be broken down to fully explain the deeper meaning of its parts.

Giorgi (2009) explained that the shapes that the structure revealed offered depth and insight into understanding the unique variances and abstract nuances of the participants' subjective experiences. Insights could be further explored by revisiting the data in order to present the circumscribing process and dynamics of the findings, and then by going back to address the research questions, the purpose of the study was satisfied. Giorgi (2009) said that explaining and understanding the deeper meaning of the structure's parts was often accomplished by looking into the contrasting constituents within the intrastructural differences.

The entire process of descriptive phenomenology was affected by my intuitive interpretation, especially during transformation, which made assuming a mindful, sensitive state of awareness essential. During this process, it became clear that my experience of creating a mandala and answering the interview questions could serve as an indication of the achieved level of saturation. Giorgi (2009) discussed the key constituents as being those that determined whether the structure of the phenomenon stands or collapses without them. In other words, would adding my data make a difference or change the descriptive structure to that extent?

In order to see if saturation had been reached or whether the structure would change with the addition of my data and continue to stand after its removal, I determined my meaning units and assigned R4 as my pseudonym. R4's meaning units in the first step of transformation from first to third person are followed by a discussion of whether or not the structure would stand with and without R4's data.

R4 Meaning Units

R4 has been practicing MM naturally for many years, and she has had awareness of what MM is for 7 years, and being mindful is her lifestyle. When practicing MM, she is open and in the present moment experiencing everything with curiousity, as it is, unique and new, and she is paying attention to what she is doing. When meditating in a group or listening to an audio MM, she is aware of her body as she breathes, and she is watching thoughts, or memories, float by. She is also aware of sounds such as the voice of the guide, and her emergent feelings.

R4 defines MM as the practice of having attentional focus in the present moment or paying attention to what you are doing without judgement. When practicing MM, R4 focuses on her breath and body and allows any thoughts to float by. In paying attention to her breath and body, she is in the present moment experiencing what she is doing as new and suspends past judgments. R4's mind is still, and she feels aware, curious, open, balanced, joyful, healthy, and spiritually aligned.

R4 focused her attention on coloring the mandala. Her only decisions were where to begin and choosing colors. R4 chose to start from the center and is picking contrasting colors to be next to each other. She used the same color for each of the same shapes so the colors were symmetrically balanced. The deeper her focus became, the more oblivious she was to her surroundings.

While coloring, she simultaneously feels aware and unaware or being in and out of her surroundings. As her focus on creating the mandala deepened, R4 felt as though everything outside of her disappeared. She felt joy and excitement experiencing the colors.

The meaning R4 ascribed to her mandala creating experience was fulfillment. Coloring the mandala felt calming, pleasurable, and satisfying. R4 was easily able to be attentive, totally focused, and in the moment while coloring.

R4 experienced changes in her body and in her awareness during the mandala task. She immersed herself and lost track of what was going on around her, and she felt

peaceful and happy. R4felt like her body disappeared, and outside influences were suspended as she focused on coloring.

R4 is aware that she is experiencing Csikszentmihályi's flow. R4 is aware that flow is a deeply mindful state of awareness. Experiences that were reminiscent to experiencing creating a mandala for R4 were writing, playing computer games, singing, dancing, MM, speaking or teaching, and having a deep conversation with someone.

When writing, R4 loses sense of everything around her and is lost in the world she is writing about or creating. For R4, writing is a creative thrust, and she feels compelled to write. Writing is her passion, and R4 feels entranced and intuitively guided when she is writing. She feels that the house could fall down around her and she would not notice. For R4, writing means self-expression, emotional release, and passion. Playing computer games are like writing for R4. She gets lost in them and can play for hours. Playing computer games means escaping into fantasy for R4.

Singing gives R4 a feeling of freedom, peace, and joy, and she is focused on what she is doing in the present moment. When driving, she has to focus on driving and pay attention to what she is doing and where she is going. R4 is unable to carry on a conversation when she's driving, but she can always sing. She feels like signing improves her driving. Singing means freedom to R4 and acts as a powerful, emotional release for her. Dancing is like singing, but not easily done while driving. Dancing takes R4 back to her childhood.

For R4, being mindful is a lifestyle. She flows with life's rhythm, listens to her intuition or inner guidance, and pays focused attention to what she is experiencing and doing. When practicing MM, R4 is aware of her body as she breathes, watching thoughts or memories float by, and paying attention to what she is doing brings her focus to the present moment. R4 feels calm, joyful, and has a sense of wonder. Her mind is still, and she is aware of her inner being, internal and external sounds, and her emergent feelings. For R4, the meaning of MM is fulfillment and wellbeing.

Speaking to a group or even in having a conversation and speaking with one person brings R4 into the present moment, and she sees images and feels words move through her like they do when she is writing about something or creating a story. For R4, having a deep conversation is like speaking but on an intimate level that is more focused on listening and seeing images. R4 is only aware of the other person and herself, and she is oblivious to her surroundings. R4's meaning for speaking, teaching, and having intimate conversations is connecting, sharing, and relating.

Discussion

Adding R4's data to the descriptive structure would lead to an interstructural enhancement of the circumscribed meaning units; however, none of R4's meaning units were different or extraordinary enough to substantially change the descriptive structure. This meant that adding R4's meaning units, enhancing or altering the structure for P, and then removing R4's data, would not cause the structure to substantially change or fall. Thus, saturation was achieved.

Adding R4's data and exploring the areas of greatest enhancement provided depth. There were three areas that were most relevant. I identified them as paragraphs three, nine, and seven of the structure.

The third paragraph stated that focus for P is attentive, intense, and full during coloring. The experience of creating allows P to freely express themselves and takes P back to their childhood. For the most part, childhood is when P feels imagination was more vivid and more freely expressed. Creating also makes P feel happy, good, complete, and like a child.

The third sentence of paragraph three said that for the most part, childhood was when P felt their imagination was more vivid and more freely expressed. This came from beliefs held by P1 and P3, which are not held by P2 and R4. If R4's data were added, the structure would be slightly amended to in part, P felt that childhood was when their imagination was more vivid and more freely expressed.

The area of reminiscent or similar experiences, which showed the most contrast as a whole, was the next identified area. Paragraph nine stated that Ps' experiences that were reminiscent to creating a mandala varied greatly from everything, to noncreative, to nothing; however, the experiential factor linking all similar experiences is Csikszentmihályi's flow. Intense, pleasurable or euphoric and exhilarating experiences feel reminiscent or similar to experiences of creating. During these experiences that feel similar to experiences of creating, P feels a sense of freedom and remembers feelings from childhood.

R4's examples were not contrastingly different from Ps', but R4 included MM as an experience that felt similar to creating a mandala. My knowledge of MM's relationship to creativity was an identified bias, and this dissertation is arguing that MM and creating are synonymous. P did not exemplify MM as reminiscent to creating a mandelea: however, adding R4's example would not change the structure.

As shown in the seventh paragraph of the structure, Ps' descriptions of MM and creating often carried the same meanings. Paragraph seven stated that P gave many descriptions regarding experiences of creating and of MM that had the same meaning. Descriptions for practicing MM that were similar to those used to describe creating were relaxing, enjoyable, rejuvenating, feeling open, going within, being in the present moment, an everyday habit, being free from thoughts, feeling curious and insightful, and seeing things anew. Descriptions for experiences of creating that were similar to those used to describe MM were relaxing, feeling energized, new, feeling open, an everyday thing, feeling free from worry, being imaginative, staying in the present moment, and going within or forgetting everything and anything outside of oneself.

Breaking the Structure Down

Giving depth and insight into understanding the unique variances and abstract nuances of participants' subjective meanings was achieved through breaking the structure down into the shapes or textures where there was the most contrast and similarity within intrastructural differences. In the area of demographics and in general, P2's descriptions tended to be untypical. Her descriptions were open, novel, and abstract, and they emerged

throughout the interview rather than directly. She said that the first demographic question was hard for her to answer, and she really did not offer a level of education. Even gender and culture-ethnicity were abstract concepts to her. The words strong, intuitive, dominant, masculine and feminine were used to describe her gender. P2 agreed with me that she really did not identify with a level or a gender, and she stated, "top of the food chain," to describe her ethnicity and culture. Both P1 and P3 directly answered the demographic questions with concrete responses. The contrast between P2's presentation and the other participants' presentations seemed to be attributed to her being childlike, without labels, and living in the present moment, or outside of time as she described it.

P2 and P3 have been practicing MM and living mindfully for most of their lives. In contrast, P1 has been practicing MM for three months. There was a commonality in the descriptions of MM regarding their experience of listening to the guided audio meditation as a group. P1 stated that it opened him up to present moment awareness. He focused within and was relaxed and open to seeing things as new. He felt more stable and calm. P2 described it as being rejuvenating, relaxing, and calming. She went within and felt insightful and curious. For P3, it was relaxing. She went within and put her thoughts aside. Despite contrast in P1's length of practicing MM compared with P2 and P3, the participants' definition, and descriptions of their group MM experience were very similar. This suggested that practicing MM had the same perceptual results regardless of the length of past MM experience.

All three contrasted in their methods of coloring in the mandala. P1 started slowly and replaced each marker with its cap on in the holder before selecting another. He took his time deciding what color to use and in switching to the next color. P2 started immediately, her markers were placed in a pile in front of her after their use. She changed marker colors more frequently than P1 and P3. P2 took the time to cap the ones she was not actively using. P3 started right away and selected various shades of purple, which she placed in front of her and began using. She used each color for an extended period of time, working from the center outward as if she had a plan, and capped them after use. The variance in coloring methods appeared to be related to participants' amount of previous artistic and creative experiences. P2 and P3 are creatives with lifetimes of artistic experiences. P1 considers himself to be artistically and creatively inexperienced. P1 had not done any artwork since elementary school; therefore, he most likely moved slowly due to his unfamiliarity.

P1 and P3 described creativity being negatively associated with age, meaning that people are more creative in childhood or as people get older, they become less creative. P1 said that he was more creative when he was younger, and he added that as we get older, we get rutted and are less creative. When describing the mandala coloring experience, P1 felt like he went back in time to childhood when his imagination was a lot more vivid. P3 said that coloring the mandala took her back to her childhood. She explained that, as adults, people are artistic, but they are unable to freely express themselves and their true desires. Certain patterns and limiting belief structures that were

learned were what held people back from freely expressing themselves. P2 did not express such beliefs.

P2 appeared to be reliving the experience or experiences of creating through imagery during our interview. She was animated and smiling while having a wistful and dreamy quality in her eyes as she spoke. She said that she loves creating and creates all the time. She explores her inner self and could create forever. When creating, she feels happy, good, complete, and like a child. In contrast to P3's and P1's belief about age hindering creativity, P2's lack of belief in age as a limitation appeared related to her joyful, childlike attitude. She lives life in the present moment, or outside of time.

P2 and P3 consider themselves to be creatives. In contrast, P1 does not consider himself to be artistic or creative. This contrasting intrastructural difference appeared to have little bearing on the participant's shifting of awareness into Csikszentmihályi's state of flow during their coloring mandalas.

P1 described being distracted and having an awareness of shifting out of and back into intense focus or flow suggesting that his lack of artistic and creative experiences and unfamiliarity with flow contributed to his distractibility. He was focused on choosing and applying colors. He was pleasantly surprised and could not believe the results of his effort. P2 described her shift in awareness as forgetting about everything and everyone around her. She was at ease, immersed, fully engaged, and she finished two mandalas. Her subtlety in describing her shift in awareness strongly suggested that, like living her life in the present moment, she may be consistently experiencing flow. P3 described

shifting into a deeper level of awareness or flow when starting to work with purple. The mandala became alive with her effort. Where the mandala took her was always a surprise. The similarity of the participants' shifting into flow during a creative experience suggests that flow, an intense state of mindful focus, had the same perceptual results regardless of past creative experience. P1 shifting out of flow suggested that his lack of artistic and creative experiences and unfamiliarity with flow contributed to his distractibility. P1 experiencing flow for the first time after practicing MM suggests that MM worked as a primer for his shifting into flow.

Discussion of Intrastructural Variance

The most contrasting intrastructural variances emerged in the area of reminiscent or similar experiences and as Giorgi (2009) indicated, the implications were meaningful. For P1, the experience of creating a mandala felt completely new, and despite prompts, he was unable to recall similar experiences. P2 Easily came up with similar experiences. Her similar experiences of riding horses, being in nature, flying in a fighter jet, and swinging were outside the realm of typically creative experiences. Being free, being away from everything, and being a child were some of the descriptions associated with her examples of similar experiences to coloring mandalas. P3 Took a big picture approach and said that everything was similar to her experience of creating mandalas. When directed, she came up with some more typical creative experiences, and then she added choosing what to wear each day. She stated that being creative is an everyday thing,

which was very similar to her being habitually mindful every day. For P3, both creating and MM were habitual.

The variance between participants appeared in participants' familiarity with flow, which linked the participants' history of having creative experiences with their familiarity in practicing MM. This further suggested that MM and creating are neuropsychologically identical and the same construct and state. This between participant variance in familiarity with MM and creative flow also supported that MM enhanced creativity through neuroplasticity by opening neural pathways and like repetitively using a muscle, repeated activity strengthened neural pathways like muscle memory. In other words, creativity developed as a habit through the strengthening of repetitively creating and repetitively choosing to use imagination.

Addressing the Research Questions

The study was designed to inquire into meanings ascribed to lived experiences regarding creating for individuals who practiced MM. The main research question was followed by three closely related questions. Answering each research question with Ps' descriptive structure provided the psychological structure describing lived experiences of creating for MM practitioners.

RQ1: What is the subjective meaning of the experience of creating for MM practitioners? The subjective meaning of the experience of creating was often described as a whole rather than only for the mandala creating experience. Creating for MM practitioners meant feeling free, going within, moving from the center outward, a need

for self-expression, forgetting everything and anything outside of oneself, being relaxed, and feeling energized. For MM practitioners, creating often has a purpose, there is a passion, a drive, and a deep need to express oneself. Color was important to MM practitioners and contributed to the experience of creating by influencing imagination, attention, and attitude. The meaning MM practitioners held for the lived experience of creating was described as an addiction to creative self-expression, to being in flow, and to the gratification of seeing the end result for one's effort.

RQ2: What is the experience of creating like for individuals who practice MM? The experience of creating allowed MM practitioners to freely express their self and took them back to their childhood. Childhood was when MM practitioners felt their imagination was more vivid and more freely expressed. Creating also made them feel happy, good, and complete like a child. MM practitioners described a shift of awareness into Csikszentmihályi's flow during the creative experience of mandala coloring. The shift of awareness into flow seemed to occur regardless of artistic ability or familiarity with creative flow; however, distractibility and shifting out of flow appeared related to a lack of creative experience and familiarity with flow. MM practitioners were pleasantly surprised by the results and that the mandala had seemed to come alive with their effort.

RQ3: How do MM practitioners feel about the experience? The experience of creating lulls and satisfies, and MM practitioners felt more open, more productive, and more imaginative. The drive to create feels like pressure, MM practitioners were bursting to express themselves, and wanted to create all the time. MM practitioners felt very

familiar with creating and experiencing Csikszentmihályi's flow. Alternatively, having a creative experience was less familiar, and feeling Csikszentmihályi's flow was completely new. The shift in awareness to flow was seamless, and experiencing a mindful, euphoric focus when in flow was consistent.

RQ4: Is there anything reminiscent about the experience of creating for these individuals? For MM practitioners, similar or reminiscent experiences to creating a mandala varied greatly from everything, to atypical-original, to nothing; however, the experiential factor that linked all examples was Csikszentmihályi's flow. For MM practitioners, lived experiences of creating and experiencing flow were new and beyond words, and they felt similar to childhood freedom. An intense, euphoric, exhilarating experience of ultimate freedom and happiness felt similar to creating and experiencing flow. Experiencing creating and MM were described by words that had similar meanings such as relaxing, being in the present, going within, everyday habits, seeing things anew, and experiencing flow or a heightened state of consciousness by MM practitioners. MM practitioners live in alignment, mindfully, and in the present moment; therefore, MM is more than just a meditation practice.

Solidifying the Structure

Revisiting participants' lived meanings and individual contrasts and similarities that shaped the structure solidify common components or constituents (Giorgi, 2009). According to Giorgi (2009), a constituent is concrete and essential to the lived experience and overlaps with its themes. Repeated patterns or themes include and support the

essential component, constituent or essence of lived experiences of a phenomenon (Giorgi, 2009). Therefore, lived meanings of MM practitioners P1, P2, and P3 as individuals in the study were applied to the structure.

Subjective Psychological Structure

The subjective meanings of lived experiences of creating for these three MM practitioners were often described by P2 and P3 as a whole rather than only for their mandala creating experience. Creating for these MM practitioners meant feeling free, going within, moving from the center outward, a need for self-expression, forgetting everything and anything outside of oneself, being relaxed, and feeling energized. For P2 and P3, there was purpose, passion, love, and a drive to create. This drive was described by P3 as an addiction to self-expression and a deep need for the gratification of seeing the end result of one's efforts. P2 described creating all the time and that she needed to be creating to be happy. These MM practitioners described color as being integral to creating their mandalas. P1 described enjoying selecting colors, blending them to please the eye, and paying attention to colors to regain his focus after being distracted. P2 said that using color is her favorite thing, she loves exploring colors and finding new color combinations. P3 said that color is important, everything has a color, and color can affect mood. P3 described noticing her awareness shift when she was working with the color purple.

These MM practitioners' likened creating mandalas to the freedom they had as children. The three MM practitioners associated being free with being a child, and P1 and

P3 believed that childhood was when their imagination was more vivid and more freely expressed. Creating made P2 feel free, happy, good, and complete like a child. Creating mandalas allowed these three MM practitioners to freely express themselves, and they were taken back to their childhoods. P3 felt that experiences of creating lull and satisfy. P1 described feeling more open, more productive, and more imaginative when he colored his mandala. For P2 and P3, the drive to create felt like pressure. P2 and P3 were bursting to express themselves, and they wanted to create all of the time. P1 and P3 were pleasantly surprised by the results of their coloring, and P3 said that the mandala had seemed to come alive with her effort.

These MM practitioners described their mandala coloring task as experiencing an attentive, focused, energizing, and rewarding state of present moment awareness, which was indicative of their experiencing Csikszentmihályi's flow. Their shift into flow occurred regardless of creative practice, artistic ability, or familiarity with flow; however, P1's distractibility and shifting out of flow seemed related to him having less creative practice than P2 and P3 and inexperience with flow. P2 and P3, felt very familiar with creating and experiencing flow due to their 50 years of creative practice and artistic expertise. In contrast, having a creative experience was unfamiliar to P1 due to a lack of creative and artistic exposure, and feeling Csikszentmihályi's flow was completely new for P1. These MM practitioners' shifts in awareness to flow during the mandala task were observed as being smooth and seamless, and their descriptions were consistent regarding experiencing a pleasurable and mindful focus when in flow.

These three MM practitioners' descriptions were varied regarding examples of what felt similar or reminiscent to their mandala creating experiences. P1 was reminded of nothing, as experiencing flow felt totally new to him and was not similar to anything he had previously experienced. For P2, riding horses, being in nature, flying in a fighter jet, and swinging on the rings at school as a child felt similar to creating a mandala. P2 described meanings and feelings associated with her examples as being one with the horse and nature, ultimate freedom, pleasure and extreme happiness, childhood freedom and feeling complete. P3 said that everything felt similar to her experience of creating a mandala, and creating meant everything to her. Her specific examples were costume design, theatrical performance, and color coordinating her clothes every day. P3 described a drive and passion to create, she would feel depressed if she could not create, and being creative was an everyday intention.

Words that these three MM practitioners used to describe their experiences creating and experiences practicing MM shared the same meanings which were: relaxing, enjoyable, rejuvenating, feeling open, going within, being in the present moment, an everyday habit, being free from thoughts, feeling curious and insightful, and seeing things anew. P2 and P3 were more familiar with MM, had more creative practice, and were more acquainted with flow than P1. P1 experienced flow for the first time during the mandala task. Csikszentmihályi's flow was the experiential factor that linked lived creative experiences described by these MM practitioners.

Constituents

The study explored the phenomenon of creating. Constituents provided evidence or descriptive adequacy regarding MM practitioners' lived experiences of creating. Creating was identified in the literature review as the highest level of cognitive functioning, necessary for health and wellbeing, identical to and synonymous with MM, integral to Csikszentmihályi's flow, and dependent on transcendent integration. These identities for creating were possible constituents of participants' lived meanings that shaped the structure.

- Creating is the highest level of intellectual functioning in the cognitive domain.
- Creating is necessary for holistic health and a sense of wellbeing.
- Creating is neuropsychologically identical to and synonymous with MM.
- Creating is typically responsible for the occurrence of and integral to flow.
- Creating is transcendence joined with the integration of novel experience or knowledge.

The first, regarding the highest level of cognitive functioning, supported the need for this inquiry but is not relevant to its structure. Although having a healthy sense of wellbeing was mentioned in participants' lived meanings, the structure remained solid without it. However, the next two, MM and flow, were essential to the structure, meaning that the structure would fall without them. Transcendent integration as a mechanism for creating was also structurally essential.

Summary

The purpose of this study was to qualitatively explore lived experiences of creating for MM practitioners to enrich findings about MM's role in enhancing creativity. Chapter 4 discussed the methodology and process of descriptive, transcendental phenomenology, which was applied to collecting the data, experiences of analysis and transformation, and unfolding emergent findings. By integrating revealed insights with the descriptive structure and addressing the research questions, the study's essential psychological structure was formed. Through revisiting participants' lived meanings and individual differences within the structure, the subjective psychological structure emerged and honed thematic details that constituted the structural shape and texture. Structural constituents were identified and findings were adequately solidified. Discussion of findings, recommendations, and conclusion will be presented in chapter 5.

Chapter 5: Discussion, Recommendations, and Conclusion

With increased standardized testing, there has been a decline in creativity levels for K-12 students in the U.S. educational system (Davenport & Pagnini, 2016). Creativity is discouraged by standardized testing and testing in general (Sternberg, 2012). MM has been shown to increase creative ability and performance (Colzato et al., 2014; Ding et al., 2014; Langer, 2006; Lebuda et al., 2015). MM's introduction into U.S. education can act as a solution to this dilemma.

The purpose of this study was to enrich and further understand MM's role in creative enhancement, and to gain insights and deeper realizations into how individuals who practiced MM felt about and ascribed meanings to lived experiences of creating. I used descriptive, transcendental phenomenology to explore the act of creating and revealed its essential structure from the perspectives of three individuals who practiced MM. To provide lived experiences regarding creating, voluntary participants who practiced MM colored mandalas as a group and were later interviewed individually about their experiences. Chapter 5 will discuss the findings and recommendations and conclude the study.

Understanding Emergent Findings

For my methodology I chose descriptive, transcendental phenomenology. In applying this approach, I collected descriptions of a shared lived experience of creating. Themes began to emerge as I shaped and transformed participants' descriptions into lived meanings or meaning units, and then I integrated and synthesized the meaning units into

a structure with P as an ideal. The descriptive structure was broken down into individual differences between participants and contrasts and similarities were revisited, which added depth and insight furthering transformation into a descriptive, psychological structure. The main research question was followed by three closely related questions that added depth. The integration of the research questions with the descriptive structure allowed the essential psychological structure to be revealed. The research questions were:

RQ1: What is the subjective meaning of the experience of creating for MM practitioners?

RQ2: What is the experience of creating like for individuals who practice MM?

RQ3: How do MM practitioners feel about the experience?

RQ4: Is there anything reminiscent about the experience of creating for these individuals?"

Psychological Structure of Lived Experiences

The psychological structure of P1, P2, and P3 with P as an ideal or whole served to depict the lived experience of the phenomenon in generalized form, meaning the psychological perspectives based on lived meanings of individuals were expressed for a population in general. In principal, the generalized psychological perspectives and lived meanings in the structure could be applied to more individuals than P1, P2, and P3. The psychological structure was a holistic representation and was not a definition of lived experiences regarding a phenomenon. In the study, the phenomenon was creating, MM practitioners were the population, and the essential psychological structure was creating's holistic representation for MM practitioners in general.

Psychological Structure of Lived Experiences of Creating for MM Practitioners

Subjective meanings regarding experiences of creating were often described as a whole. Creating for individuals who practice MM meant feeling free, going within, moving from the center outward, a need for self-expression, forgetting everything and anything outside of oneself, being relaxed, and feeling energized. For MM practitioners, creating often had a purpose, there was a passion, a drive, and a deep need for self-expression. Color was important to MM practitioners and contributed to experiences of creating by influencing imagination, attention, and attitude. The meanings MM practitioners held for lived experiences of creating were described as an addiction to creative self-expression, enjoyment and happiness, freedom, and gratification towards results of their efforts.

The experience of creating was like childhood freedom. MM practitioners associated being free with being a child. Creating allowed MM practitioners to freely express themselves and took them back to their childhoods. Childhood was when MM practitioners felt their imagination was more vivid and more freely expressed. Creating also made them feel happy, good, complete and free from worry like a child.

Individuals who practice MM described a shift of awareness into Csikszentmihályi's flow while coloring mandalas. The shift of awareness into flow seemed to occur regardless of artistic ability or familiarity with creative flow; however, distractibility and shifting out of flow appeared related to lack of creative experiences and

unfamiliarity with flow. MM practitioners were pleasantly surprised by their results and that mandalas had seemed to come alive with their efforts.

The experience of creating lulls and satisfies, and MM practitioners felt open, productive, and imaginative. The drive to create felt like pressure, MM practitioners were bursting to express themselves, and they wanted to create all the time. MM practitioners felt very familiar with creating and experiencing Csikszentmihályi's flow. Alternatively, having creative experiences were less familiar, and feeling flow was completely new. The shift in awareness to flow was seamless and experiencing euphoria, a mindful attitude, and focused attention were consistent for MM practitioners when in a flow state.

For MM practitioners, similar or reminiscent experiences to creating mandalas varied greatly from everything, to atypical-original, to nothing; however, the experiential factor that linked all examples was Csikszentmihályi's flow. Lived experiences of creating and experiencing flow were new and beyond words, and they felt similar to childhood freedom for MM practitioners. Intense, euphoric, exhilarating experiences of ultimate freedom and happiness felt similar to creating and experiencing flow. Experiences of creating and experiences of MM were described similarly by MM practitioners as relaxing, being in the present, going within, everyday habits, seeing things anew, and experiencing flow as a deep mindful state. Long-term MM practitioners lived their lives in the present moment; therefore, MM was more than a meditation practice.

Key Points of Supportive Findings

The study fulfilled its purpose to enrich and support findings regarding understanding MM's role in increased creativity. In addition, the underlying theoretical frameworks of creativity and mindfulness and their conceptual integration were represented. Four themes emerged from participants' psychological perspectives and lived meanings regarding their experiences creating, and there was one subtheme. The essential psychological structure was dependent upon its constituents, meaning that without them, the structure would fall.

Participants' lived meanings and individual contrasts shaped structures, and repeated descriptive patterns or themes included and supported the essential constituents regarding lived experiences of creating. The common components or invariant constituents were concrete and structurally essential to lived experiences regarding creating, and they overlapped each other and their themes. Contrasting variances within the structure added depth and insight to the findings. The findings' key points, and reviewed literature that the findings supported, were synthesized and integrated.

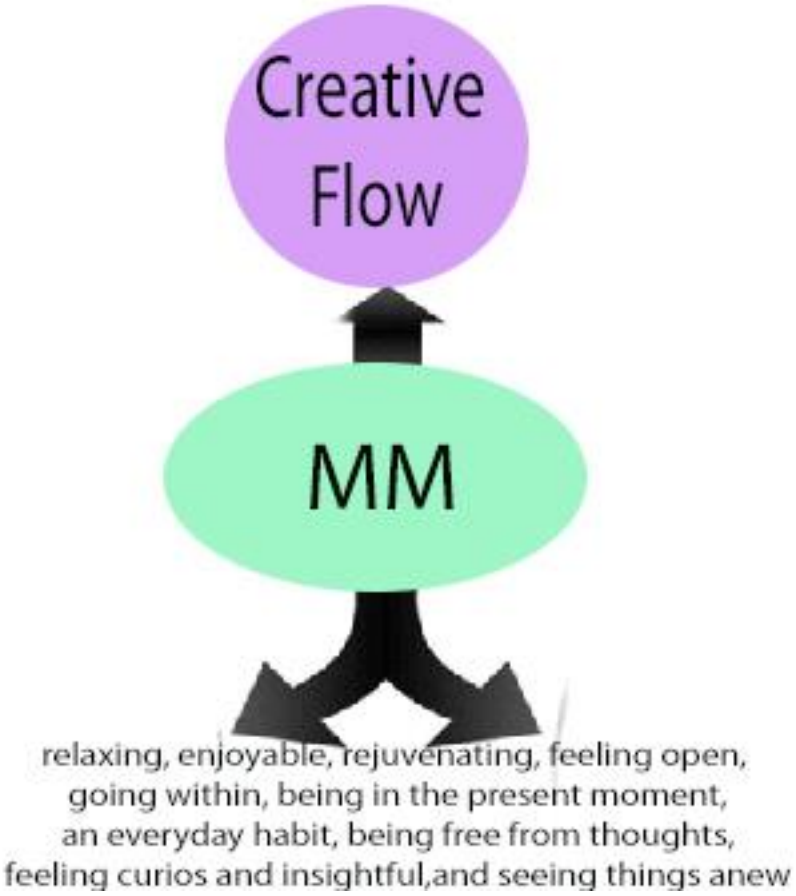


Figure 3. Visual representation of shared meanings of participants' descriptions regarding MM and creative flow.

Constituents

Identities of the phenomenon of creating served as possible structural constituents. Constituents provided evidence or descriptive adequacy within structures. Constituents were invariant, concrete, and essential to lived experiences of creating's structure. Without its constituents, the structure would fall.

The study explored the phenomenon of creating for MM practitioners. In the literature review, creating was the highest level of cognitive functioning and necessary for health and wellbeing. Creating was also identified as integral to Csikszentmihályi's flow, identical to and synonymous with MM, and transcendent integration was identified as inherent to creating.

The highest level of cognitive functioning supported a need for this inquiry but was not relevant to structure. Health and a sense of wellbeing were mentioned, but the structure remained solid without them. However, MM and flow were essential to the structure, meaning that the structure would fall without them. Transcendent integration as the mechanism of flow was also structurally essential for creating.

Creating and MM shared the root and neural mechanisms of transcendence, which when integrated through action was an enjoyable, energetic, heightened state of moment-to-moment awareness and wellbeing, or flow. The common components or constituents MM, flow, and transcendent integration were invariant, concrete, and structurally essential. MM, flow, and transcendent integration implicitly overlapped, and they overlapped with descriptive themes.

Descriptive Themes

Themes are patterns that repeat across data sets, or participants' descriptive accounts, as similar and important descriptions of a phenomenon associated with specific research questions regarding lived experiences (Creswell, 2013). The participants unanimously described their lived experiences and ascribed meanings regarding creating

in relation to four themes: color, childhood, MM, and flow. Drive or passion to create was a subtheme. Variances within themes were identified for added insight and depth.

Color

Color was described by all three participants as being closely associated with flow when they worked with markers during the mandala task. P1 described color pulling him into flow and said that color was what he was most intensely focused on while creating the mandala. P2 loved exploring new colors, colors were her favorite thing, and coloring the mandala was the part she loved most about participating in the study. P3 said that color was important because everything has color. P3 mentioned color in relation to heightened awareness, deciding on combinations, giving her freedom and permission to explore, and bringing her mandala to life.

Variances in Color

Participants' methods of coloring the mandala were contrasting. P1 started slowly and replaced each marker with its cap on in the holder before selecting another. He took his time deciding what color to use and in switching to the next color. He completed his mandala. P2 immediately started and placed her markers in a pile in front of her after their use. She changed marker colors more frequently than P1 and P3. P2 took the time to cap the ones she was not actively using. P2 completed two mandalas. P3 also started right away and selected various shades of purple, which she placed in front of her and began using. She used each color for an extended period of time, working from the center

outward as if she had a plan, and she capped them after use. She finished her first mandala and started a second mandala.

Childhood

The three participants associated childhood with freedom. Feelings regarding childhood emerged for all three participants when describing their experiences of creating in reference to being in a state of flow. Feeling free and feeling free to express themselves creatively were associated with being a child for P1, P2 and P3.

P1 described childhood as when he felt most creative and coloring the mandala took him back to it. P2 described experiences of creating as similar to feeling freedom and happiness like a child. P3 was reminded of her childhood in using the color purple. She felt freer to express herself when she was a child.

Variances in Childhood

P1 and P3 described creative freedom and expression as lessening with age. P2 did not. During the interviews, P1 and P3 presented themselves in a more linear and concrete manner while P2's presentation was more circular, abstract, and childlike.

MM

Participants' used many words with the same meanings to describe practicing MM and creative experiences. For MM they described being fully in the present moment, focused, internally aware, and joyful with a sense of wellbeing, which were characteristics of being in Csikszentmihályi's state of creative flow.

P1 was practicing MM daily for the past three months using breath and body awareness techniques. P2 described being mindful as how she lived her life and naturally practiced MM for as long as she could remember. She practiced each day by paying attention to what she was doing and used breath and body awareness techniques. P3 practiced attentional meditation on and off over the past 30 years. For the last two years, she had been consistently practicing MM. P3 practiced often throughout the day by using breath awareness techniques and focused her attention on what she was doing. Being mindful seemed natural and like a habit to P3.

Variances in MM

MM contrasted in the area of longevity. P1 had been practicing MM daily for three months. P2 had practiced MM as far back as she could remember, and P3 had practiced on and off for 30 years and consistently for two.

Flow

Csikszentmihályi's flow is an intensely focused, rewarding and pleasurable state typically attained while creating. Experiencing flow was described repeatedly by all three participants at various times during their interviews. The three participants described entering the state of flow during the mandala exercise.

P1 described feeling creative, and said that he felt more productive and more imaginative when he was coloring his mandala. P1 had never felt this way before and it was a totally new experience. He described being able to really focus, or enter flow, with ease. P1 felt distracted at times, and then he regained his focus easily.

P2 described being in flow throughout her interview. P2 said that when she was creating, she forgot anything and everything, she felt immersed, and at ease and energized simultaneously. P2 said that the pleasure and enjoyment she experienced when creating made her want to create all the time. Similar experiences to creating her mandalas that she provided as examples were the things in life that she found most favorable, rewarding and/or exhilarating.

P3 described the flow state as her creative area. P3 said that her experience of creating mandalas reminded her of everything she does, and everything she does had creative intent. She immediately went to that creative area, it helped her to loosen up and go with the flow. When she was in her creative space, she was exploring, focused, and paying attention to what she was doing. Creating was a continual and everyday thing for P3.

Variances in Flow

Contrast was in the area of having previous flow experiences. As far as he could recall, P1 had never experienced flow prior to the mandala exercise. In contrast, P2 and P3 have had countless flow experiences. P2 and P3 described maintaining daily, regular, and consistent states of flow.

Drive

Drive or a passion to create was directly described by P3. P2 described her intense love of creating and her constant desire to create. P1 indirectly implied that he could have a newly found urge to create.

P1 felt like he went back in time to childhood when his imagination was a lot more vivid. P1 said that creating his mandala was a creative experience and an act of self-expression. He said that it was hard for him to put his experience into words but described feeling self-reflective. He expressed pleasure and gratification in creating the mandala, which could hint toward a plausible desire; however, any urge to have another creative experience was not mentioned.

P2 loves creating so much that she creates all of the time, and she wanted to do it forever. She felt immersed, complete, and energized when creating. P2's mandala creating experience was akin to doing the things that were the most pleasurable and rewarding for her.

P3 stated that creating made her feel like she had a purpose and without it, she would be depressed. P3 felt pressure to create and it felt like an addiction. Creating had something that lulled her, and it was gratifying to see the end result.

Variances in Drive

Drive and creative passion were repeated patterns for P2 and P3. P1 did not express a drive to create. P1 said that he had no artistic ability, did not consider himself a creative person, and he had no prior experiences with flow. P1 expressed pleasure and gratification rather than drive. In contrast, P2 and P3 were creatives who considered themselves to be artistic with ample flow experiences. P2 felt a drive to create all of the time, and P3 was passionate in expressing her drive to create.

Essence of the Lived Experience

Csikszentmihályi's state of creative flow constituted an absolutely essential mechanism of the structure. Without flow, the structure would not only crumble, it would not exist. Flow was Csikszentmihályi's term for an intensely focused state of present moment absorption typically achieved while in the process of creating. Csikszentmihályi (1997) defined flow as being an intensely focused, rewarding and pleasurable state usually attained while creating, which was similar to the heightened moment-to-moment consciousness achieved through MM.

MM constituted an absolutely essential mechanism to the structure. Without MM, the structure would not only crumble, it would not exist. Kabat-Zinn (1994) and Langer (2014) defined MM as a contemplative, attentional meditation that was focused on present awareness through purposefully paying moment-to-moment attention, seeing everything as new and void of judgment. Flow and mindfulness are transcendent states of heightened moment-to-moment consciousness that were reached through creating and meditating respectively.

Transcendent integration constituted an absolutely essential mechanism to the structure. Without transcendent integration, the structure would fall. According to Wilber (2000), each and every moment for the meditator was creation, which was brought about through the rich interplay and kosmic connection of integration and transcendence, with creativity being the existential essence of the universe or kosmos.

Csikszentmihályi (1997) said that in the flow state, creative drive, or the energy of creative force, was experienced as an intense, focused, and rewarding engagement while

actively creating that involved focusing on what was being attended to with laser point intensity joined with abundant internal energy. Neffe (2007) stated, “Creative people are propelled by a high-octane motor: the sheer force of will. They feel the overwhelming need to be creative, and are distinguished by their determination and boundless perseverance,” (p. 262). Wilber (2000) said that creative transcendence, or flow, described creativity manifesting as transcendence and joining the integration of novel experience or knowledge in the context of existing information, in which the transcendence of boundaries allowed for further transcendence.

The transcendent nature of meditation was based on reaching a sustained state of transcendence that was integrated or aligned with the intellectual and sensory functioning of the body (Horan, 2009). At a transpersonal level of creating, whereby each and every moment for the meditator was creation (Wilber, 2000), the meditator became pure consciousness (Horan. 2009). The differences between meditators and creatives were found in their intentions (Horan, 2009).

Horan (2009) said that in order to attain a sense of wellbeing, meditators sought sustained transcendence through moment-to-moment focus to solve the limitations of phenomenal existence. Alternatively, creatives achieved transcendence through moment-to-moment focus in order to express themselves, contribute a product, or find a solution through temporary transcendence (Horan, 2009). However, the differences in intention for meditators and creatives at the neuropsychological processing level were nonexistent

as the root mechanisms, regarding transcendence as an active attentional moment-to-moment awareness, were the same (Horan, 2009).

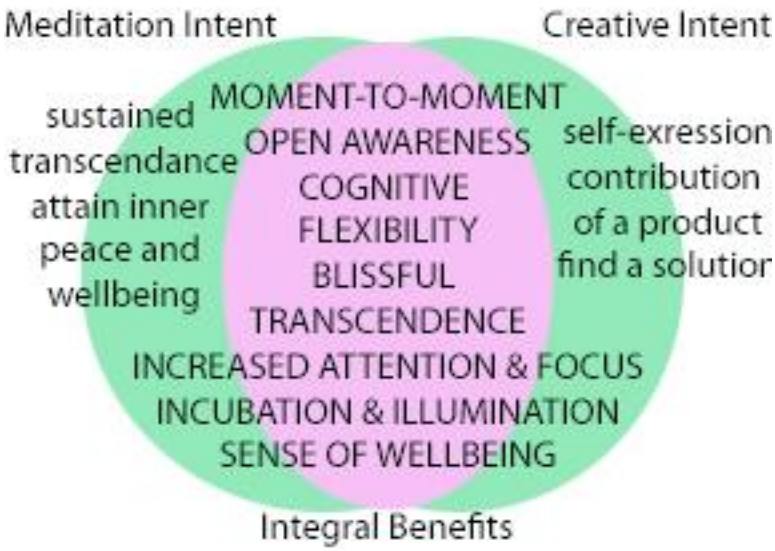


Figure 4. Visual representation of holistic synchronization: meditative and creative intentions differ but same neural integration, benefits, and root mechanisms.

Experiencing Flow

Participants described being in a state of flow during the mandala exercise. Neither the length of creative practice, artistic expertise nor familiarity with being in a state of flow seemed to have hindered or assisted entering flow. However, this was a qualitative study and there were no measures detecting participants' ease of shifting into flow. Thus, participants entering flow with equal ease was an observational assumption.

P1 was distracted and moved out of and back into flow while P2 and P3 maintained the state of flow. The influence of artistic ability, expertise, and amount of creative practice on the active state and maintenance of flow were supported by flow

theory. Csikszentmihályi (1997) said that knowhow and experience did play a role in assisting flow. Sternberg (2012) supported creative experience being a factor in maintaining flow. Sternberg's view was that creativity was an attitude of seeing things in novel ways, which developed through attention and repetition like a habit. Referring to MM, Muraven & Baumeister (2000) said that neurologically, through repeated practice, neural pathways build in strength and commitment similar to muscle memory. Furthermore, Horan (2009) said that through neuroplasticity, attentional patterns altered the cortical maps of the brain by strengthening and creating neural pathways, and Sabaawi (2004) said that active focus on a particular stream of consciousness was the critical mechanism of neuroplasticity.

As creatives, P2 and P3 described shifting into flow throughout their interviews. They described flow's characteristics of intense and rewarding focus when ascribing meanings for their experiences that were similar to creating mandalas. For P2 and P3, flow was the common denominator for every instance that felt similar to them.

P1 could not recall ever having experienced anything similar to how he felt when he colored his mandala. P1 has designed and remodeled existing homes for years and was adept at doing so; thus, he was actively creating things when he worked. However, since he had been doing similar things repeatedly for many years, P1's work had become mindless, patterned or routine. P1 had not colored or produced any kind of artwork since childhood. P1's experience of creating a mandala was the first time that he had ever experienced flow to the best of his recollection.

Langer (2006) said that even brief MM interventions increased creative thought and performance. P1 practiced MM before creating a mandala and experienced flow, which supported Langer's findings. P1 practiced MM daily for three months before participating in the study and experienced flow for the first time, which suggested that MM worked as a primer and enhanced creativity through neuroplasticity by opening up or creating neural pathways.

Variances

According to Giorgi (2009), variances within a structure often provided great insight into the meanings participants' held about lived experiences. Thus, the insights that emerged further supported the study's underlying theoretical frameworks, creativity and mindfulness, and their conceptual integration as well as enriched its reviewed literature. Variances within themes were integrated in relation to the literature reviewed in regard to research questions. The main research question had three closely related questions that added depth, and participants' meaning units assigned to *RQ4* were the most varied.

Participants' contrasting and similar responses to interview questions seven and eight revealed textural insights that shaped the structure. The most obvious contrasts garnered notice to subtler variances. The interview questions directly associated with *RQ4* that provided the most contrasting responses were:

7. How would you describe other experiences that seem similar to your coloring the mandala?

8. How would you describe the way ____ made you feel? How would you characterize the meaning of ____? ...for each experience given.

In order to meaningfully interpret contrasting responses regarding similar experiences, variant data regarding individual differences between participants were explored. In order to add richness and texture regarding similar experiences, individual differences between participants that were similar and more subtle in contrast were also explored. Obvious demographic intrastructural contrasts between participants were in their length of practicing MM and creative aptitude. P1 had practiced MM short-term. P2 and P3 had practiced MM long-term. P1 had little to no creative aptitude or experience. P2 and P3 were creatives.

Creatives, according to Horan (2009), were very amenable to achieving a mindful state of moment-to-moment awareness. According to Sternberg (2012), creatives consistently approached life in new ways rather than automatically reacting to whatever came their way. Csikszentmihályi (1997) said that creatives had unusually fresh perceptions of reality. Creatives were open, flexible, and experienced life in novel ways, and creatives were able to focus on what they were attending to with laser point intensity and abundant internal energy (Csikszentmihályi, 1997). Therefore, in addition to readily achieving a mindful state of consciousness, flow was easily attained and sustained by creatives.

Variance for P1

P1 was unable to provide any similar experiences to coloring his mandala. P1 considered the mandala task a creative experience and described being in flow during its creation, meaning that he experienced flow for the first time. P1 experienced flow for the first time directly after practicing MM which supported Langer (2006).

Langer's strand of mindfulness was considered creative (Hart et al., 2013), and brief mindfulness induction resulted in increased levels of creativity and performance (Langer, 2006). Horan (2009) proposed that MM enhanced creativity through neuroplasticity, which neuropsychologically explained Langer's results.

Research, concepts, models or theories that might have contradicted Langer (2006) were Kabat-Zinn's more practice oriented approaches to MM. Kabat-Zinn (1994) created therapeutic treatment regimens designed to help individuals change dysfunctional behavior patterns, which took considerable time to accomplish. Langer (2006) offered educational research that had investigated whether creative thinking was affected by briefly inducing mindful perspectives in individuals, which resulted in increased creative thinking and performance. The purpose for Kabat-Zinn's research was therapeutic and Langer's was educational; therefore, differences were in their intentions rather than being contradictory approaches.

According to Hart et al. (2013), Langer's MM interventions were instructional, brief, and required little to no continued practice, and Kabat-Zinn's therapeutic MM interventions were highly detailed, multifaceted, and required daily practice over a period time; whereby mindfulness was considered both a cognitive mode or state of

consciousness and a meditative practice; however, the core mechanism beneath both strands of MM was self-regulation of attention.

An obvious difference between participants relevant to contrasting responses pertaining to similar experiences had to do with longevity in regard to having creative experiences. Including individual differences between participants that were more subtle in contrast regarding similar experiences added insight, richness and texture. Obvious and more subtle similarities between participants were also noted. P2 and P3 had lifelong and ample amounts of creative experiences and experiencing flow. P1 had little to no creative experiences and had not experienced flow prior to participating in the study.

P1 tended to be direct and concrete with his responses especially in regard to demographics. P1 considered himself neither artistic nor creative, but good at what he does, which was work on anything with an engine and remodel homes. Csikszentmihályi (1997) said that creative knowhow and experience played a role in assisting flow. The inability of P1 to recall ever feeling anything similar to experiencing the state of flow inferred that if he had artistic knowhow and previous creative experiences, P1 would have hypothetically provided similar instances of experiencing flow. Also, if he had previous creative occurrences experiencing flow, it would have hypothetically helped him maintain flow without distraction. P1 offered insights into longevity's role for MM and creativity regarding lived experiences of creating.

P1 was raised in the southern U.S and said that his childhood was regular and unremarkable. His first memories were when he was in school, he had chores to do

afterward, and he was rarely alone. P1 said that he had not done any artwork since he was in elementary school, and coloring the mandala took him back to his childhood when he was more creative. P1 believed that creativity lessened with age because people got rutted into routines and lost their ability to freely express themselves. Sternberg (2012) said that creativity, meaning using imagination and thinking in novel ways, typically developed in childhood and that pressures to conform to society discouraged its development.

Variance for P2

As an only child of older parents who were overly protective, P2 played alone and consistently amused herself. Her parents were supportive and encouraging, but were not affectionate. P2 was intensely curious and took things apart to see how they worked, she loved animals, and was socially outgoing, which balanced her rich inner world. Rogers (1954) said that heightened creativity developed when certain internal and external conditions were met. Internal conditions were an openness to new experiences, self-regulation, and curiosity (Rogers, 1954). These internal conditions emerged when psychological safety and psychological freedom were promoted externally coupled with an internal challenge of integrating a low degree of emotional comfort with a high level of encouragement towards achievement (Rogers, 1954).

P2 instantly came up with similar experiences to creating mandalas. Her examples of riding horses, being in nature, flying in a jet, and swinging were not typically considered creative experiences. Feeling free, ultimate freedom, and feeling free from worry like a child were meanings P2 ascribed to her examples. P2's responses regarding

level of education and gender were described in abstract terms without common labels. Her responses tended to be indirect and emerged throughout the interview in a circular fashion. She said that she lived outside of time, relied on intuition, saw everything as new, and was curious like a child. Sternberg (2012) said that creatives consistently approached life in new ways. Csikszentmihályi (1997) said that creatives had unusually fresh perceptions of reality, and they were open, flexible, and experienced life in novel ways.

The examples P2 described as similar were instances that she loved the most, which were the words she used to describe her mandala coloring experience. P2 described experiencing flow as an escape away from everything, anything, and everyone with complete freedom and happiness. Csikszentmihályi (1997) said that pleasurable feelings were common in experiencing flow and that associated feelings of reward and pleasure enabled flow to be experienced when doing things not typically thought of as creative. Sternberg (2012) said that creativity was developed through repeatedly imagining or thinking in novel ways that became a habit, and then all situations in life were approached creatively.

Variance for P3

P3 was direct in her responses and added a lot of detail throughout the interview. As the youngest of five children raised in a wealthy upper class family in Mexico, P3 described her ethnicity and culture as strange, and added that she liked being strange. It was strange because they were wealthy, western Europeans who lived in Mexico. P3 said

she felt like a shadow when she was young, she spent her time playing alone, and hardly ate anything. P3 said that her mother let her do what she wanted and never pressured her to eat or blend in with her siblings. Her father was a proud man who expected a lot from her and her siblings. P3 was both curious and mischievous and often pulled pranks on her older siblings. Rogers (1954) said that heightened creative development occurred with the internal challenge of integrating a family environment with the chaotic complexities of a low degree of emotional comfort and a high level of encouragement towards achievement.

P3 said that she still carried the attitude of privilege within the class structure she grew up with. She said that she was highly intuitive, stubborn, and not afraid to voice her opinion. Coloring with purple took P3 back to her childhood when she was free to express herself. P3 believed that for most people, creativity decreased with age due to societal pressures to conform. According to Sternberg (2012), creativity was not inborn, it developed like a habit, and like any habit creativity could be promoted or discouraged. Creatives had distinct characteristics, which were: ability to synthesize information in novel, nonconformist, unconventional ways and were knowledgeable within a flexible context, saw the big picture and also its details simultaneously, strong sense of self-efficacy, stood up to challenges and tolerated vagueness or stubborn yet flexible, innate and highly focused motivational drive, received environmental support and reward toward creativity (Sternberg, 2012).

P3 said that she gained pleasure from creating. Everything was similar to P3's experience of mandala coloring. Csikszentmihályi (1997) said that pleasurable feelings were common in experiencing flow and that associated feelings of reward and pleasure enabled flow to be experienced when doing things not typically thought of as creative. P3 said that she does everything with creative intent and that P3's desire and need for self-expression was so strong that it felt like an addiction, but it was a good addiction. Sternberg (2012) said that creativity was developed through repeatedly imagining or thinking in novel ways that became a habit, and then all situations in life were approached creatively. P3 said that without an ability to create, she would be depressed. Jung (2001) said that health and wellbeing were dependent upon creativity.

Alternate Perspectives

Sen and Sharma (2011) offered an alternative perspective to add to Sternberg (2012) and Rogers (1954) who both viewed heightened creativity as not being inborn and developing in childhood through certain internal and external environmental climates. According to Sen and Sharma, creativity could be learned; however, some individuals were born with a natural gift or talent independent of experience, learning, or internal and external environmental climates. Furthermore, Wilber (2000) and Jung (2001) said that the act of creating was a transcendent connection to creator consciousness and that it flowed through the individual who was creating. These alternative views accounted for child prodigies with natural or seemingly inborn gifts and talents, and adult individuals who spontaneously developed a talent.

Discussion of Insights and Essence

Participants' Individual Differences

Variant data regarding individual differences between participants were explored to meaningfully interpret contrasting and similar responses. Exploring obvious and more subtle contrasting and similar differences between participants added insight, richness, and texture. Obvious intrastructural contrasts and similarities between participants were in their length of practicing MM and creative aptitude. P1 had practiced MM short-term. P2 and P3 had practiced MM long-term. P1 had little to no creative aptitude or experience. P2 and P3 were creatives. P2 and P3 had experienced flow as far back as they could remember. P1 could not recall experiencing flow prior to participating in the study.

Similar Individual Differences

P3 gained pleasure from creating, and everything was similar to her experience of mandala coloring. P2's examples of riding horses, being in nature, flying in a jet, and swinging were not typically considered creative experiences. Csikszentmihályi (1997) said that pleasurable feelings were common in experiencing flow and that associated feelings of reward and pleasure enabled flow to be experienced when doing things not typically thought of as creative.

P3 felt a pressure to express herself, and she was bursting with desire to create. P2 was constantly creating and described experiencing flow as an escape away from everything, anything, and everyone with complete freedom and happiness. Sternberg (2012) said that creativity was developed through repeatedly imagining or thinking in

novel ways that became a habit, and then all situations in life were approached creatively. Csikszentmihályi (1997) said that flow, as a creative force, was experienced as an intense, focused, and rewarding engagement while actively creating that involved focusing on what was being attended to with laser point intensity coupled with an abundance of internal energy.

P3 was direct in her responses and added a lot of detail throughout the interview. P1 tended to be direct and concrete with his responses especially in regard to demographics. Coloring with purple took P3 back to her childhood when she was free to express herself. P3 believed that for most people, creativity decreased with age due to learned behavior patterns and societal pressures to conform. Coloring the mandala took P1 back to his childhood when he was more creative. P1 believed that creativity lessened with age because people were rutted into routines and lost the ability to freely express themselves. Sternberg (2012) said that creativity typically developed in childhood and that pressures to conform to society discouraged its development. Furthermore, creativity was not inborn, it developed like a habit, and like any habit creativity could be promoted or discouraged.

Thematic Insights

The study inquired and explored the phenomenon of creating, which identified three structural constituents regarding creating from the literature review. Integral to Csikszentmihályi's flow, identical to and synonymous with MM, and transcendent integration were constituents of the three mindful participants' whose lived meanings and

thematic details shaped the structure. Insights emerged through similar and contrasting individual differences of participants' transformed meanings within the descriptive themes of color, childhood, flow, MM, and drive.

P3's accounts describing her lived experiences of creating were direct, passionate, and colorful, and she provided insights regarding creative drive and the similarly habitual natures of MM and creativity. P3 said that without an ability to create, she would be depressed. Jung (2001) said that health and wellbeing were dependent upon creativity. P3 does everything with creative intent and her desire and need for self-expression was so strong that it felt like an addiction, but it was a good addiction. P3's feelings of dependency as a need for self-expression offered insight toward creative drive or passion. In addition, insight for drive was provided through her expressed addiction to flow.

P2's accounts of her lived experiences regarding creating were abstract and nonlinear. She provided insights into flow as a consistent state of consciousness, and towards creativity and MM being synonymous. P2 lived outside of time, relied on intuition, saw everything as new, and was curious like a child. Sternberg (2012) said that creatives consistently approached life in new ways. It was difficult for P2 to distinguish experiencing MM from creating, and she ascribed the same meanings to them both. As a living example of MM and creativity being synonymous and neuropsychologically identical, P2 offered insight regarding transcendence as a natural and almost perpetual state of being.

P1 tended to be direct and concrete with his responses. His accounts regarding his lived experience creating a mandala offered insight into how MM assisted in achieving flow. P1 focused deeply on coloring his mandala. He blended colors to please the eye and was surprised by the beauty of his creation. In practicing MM, P1's consciousness was opened to experiencing flow through moment-to-moment focus, and in achieving transcendence merged with creative force, P1 felt more imaginative, more productive, and free to express himself creatively. P1's experiencing flow for the first time gave insight into how MM can work as a solution to creativity's discouragement.

. Participants' individual differences offered insights regarding longevity's role towards MM and creativity. Long-term MM practitioners P2 and P3's responses regarding creative flow experiences contrasted with short-term MM practitioner P1's. Participants' similar and contrasting differences supported and enriched Berkovich-Ohana et al. (2017), which stated that long-term MM practicing individuals had higher creative thinking scores and reduced mindlessness when compared to short-term MM practicing individuals.

Composite Structure of Insights

Contrasting and similar accounts of participants' lived experiences enriched the literature regarding MM's role in achieving flow and provided lived examples of MM and creativity being synonymous and neuropsychologically identical. Insights regarding MM longevity were garnered through participants' individual differences. Long-term MM practicing participants' lived creative experiences contrasted with short-term MM

practicing participant's lived experiences creating. Long-term MM participants were creatives, and a short-term MM participant was not.

Participants described experiencing flow as feeling happy and free from worry like a child. They were reminded of their childhoods when they were free to express themselves. Patterned routines and social pressures to conform were described as discouraging children's natural abilities to express themselves.

Having creative intent, using imagination, and thinking in novel ways was an everyday habit, and MM, as a mindful state, was also an everyday habit for creatives. The theme of childhood was associated with experiencing flow. Heightened creativity was shown to have developed in childhood through the internal and external environments that Rogers (1954), Sternberg (2012), and Csikszentmihályi (1997) proposed, and the internal psychological characteristics of openness to new experiences, self-regulation, flexibility, drive, and curiosity were distinctive to creatives in the study.

Holistic Structural Essence

In using, descriptive, transcendental phenomenology, the richly, uniquely, and passionately described lived experiences of creating for these three mindful participants were interpreted through a transpersonal, integral lens. Structures of lived experiences of creating for these MM practitioners were textured and shaped by their psychological perspectives that solidified the interrelated constituents, which overlapped with thematic details. The invariant components, flow, transcendent integration, and MM, were

structurally dependent on each other, overlapped with themes, and constituted the holistic essence of lived experiences regarding creating for individuals who practiced MM.

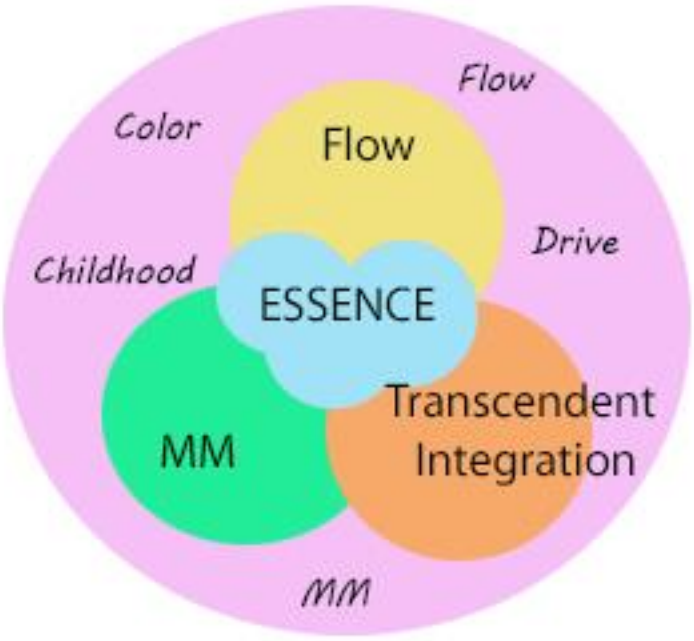


Figure 5. Visual representation of holistic essence, invariant constituents and thematic structural overlap

The essence of flow was constitutively implicit within the structure. If flow was taken away, the structure would not exist. How could flow, a deeply mindful and energy charged state of creating, be less than or apart from its whole? The essence of transcendent integration was constitutively intrinsic to the structure and could not be removed without complete collapse. Creating is transcendence joined with the integration of novel experience or knowledge. How could transcendent integration, the synthesizing mechanism of MM and creating, be less than or apart from its whole? The essence of

MM was constitutively and contextually inherent to the structure and could not be extracted without total destruction. MM was a purposive criterion and recommended solution for the study. As MM shares transcendence with creating, as an active attentional moment-to-moment awareness, MM could not be separated from its whole and was holistically integral to the structure.

Essential Transcendent Composite of Creativity and MM's Conceptual Integration

After first revealing the structure for P as an ideal, it came to me that a statement I wrote in the introduction integrating MM and creativity described the study's transpersonal essence. Several structures later, and after identifying essential structural constituents, I looked at it again. I realized that my introductory paragraph regarding creativity and MM's conceptual integration was actually a composite of its transcendent and essential psychological structure through a transpersonal integral lens.

Lived experiences regarding creating for MM practitioners was in alignment with mindfulness being an all-encompassing, open and aware cognitive state, as well as MM being an integral gateway to transcendence and heightened consciousness. Creating opened connections and integrated transcendence with psychophysiological force, which heightened focused attention and pleasure. That energetic force was one and the same with the creator consciousness of the kosmos.

Limitations

The study was limited by the inherent nature of phenomenological exploration, as phenomenology typically sought to understand phenomena through narrow criteria rather

than aiming for broad generalizability. The findings of this study were limited to three participants who practiced MM and reflected on what experiences regarding creating meant to them. Findings were limited by how their ideas were verbally expressed, and by my ability to correctly interpret, shape, and transform data into meaning units and structures. The small number of participants, their unique nature, their length of MM experience, education level, their gender, number of creative experiences, geographic location, and ethnicity or cultural background might have threatened transferability to the general population of MM practitioners. The practitioners of MM that volunteered and participated might not be a representative sample of MM practitioners as a whole. However, as the three MM practitioners were unique individuals, every interview response offered valuable and meaningful information about lived experiences of creating from these participants' perspectives.

Researcher's Experiences

The nature of the study's qualitative inquiry was interpretive, meaning that knowledge was viewed as co-constructed by three participants and me, and as both creator of the study and primary research tool, I could not be separated from data collection, analysis, and interpretation. Therefore, assuming Husserl's mindful and sensitive state of awareness was essential as the entire process of descriptive phenomenology was affected by my intuitive interpretations, especially during meaning unit and structural transformations. My creative and intrinsic role as researcher led me to include my experiences analyzing data in order to add texture and facilitate deeper

understanding regarding my processes. Analysis and transformation took place one participant at a time, so to capture the shape of my experiences pertaining to data analysis and transformation processes, I shared my unfolding in regard to each participant.

P1 Transformation

The transcribed interview for P1 was read as a whole, and I was drawn to his being unable to come up with a similar experience to creating a mandala. If he had ever felt something similar, it was a long time ago, and he could not recall when. With my extensive background investigating child abuse and neglect, gaining detailed and descriptive information through interview was familiar to me. I felt fairly certain that having a creative experience was new for him. P1 implied that what he had experienced was hard to put into words. P1 stated, "I was focusing on color-hard to relate-dark to light-sunrise to sunset. I stayed in the present." My first impression was that perhaps MM had opened P1 to seeing his experience of creating a mandala as novel. I listened to the recorded interview again and continued discerning P1's meaning units. I listened closely to our exchange surrounding interview questions seven and eight regarding similar experiences. I remembered the look on his face as he struggled for words to describe what was unexplainable, which was somehow and somewhere between frustration and awe, and it came to me. The experience of creating something was not necessarily what was new to him. P1 was constantly creating in building and remodeling. What was new to him was experiencing the state of Csikszentmihályi's flow! He had never experienced flow before! Almost simultaneously, I understood that my bias as a creative, who is

extremely familiar with flow, had hindered this realization by my taking it for granted that everyone had experienced flow at some point in their life.

P2 Transformation

Upon reading the transcribed interview for P2 as a whole, I noticed that very little was answered directly. Some of the responses to questions that I had clarified in follow up phone calls were actually answered in later responses, which made her data appear circular rather than linear. Hence, my discerning P2's meaning units required intuitive integration.

While listening to P2's interview, I remembered her joyful expressions, the subtlety of our engagement, and the depth of our rapport. She described just enough to share the images of her thoughts, and our laughter seemed to serve as an acknowledgment of my 'getting the picture'. P2 appeared to be reliving her experiences of creating through imagery. She was animated and smiling while having a wistful and dreamy quality in her eyes as she spoke. As the questions deepened, descriptions of her feelings and meanings emerged in a natural rhythm, which led me to the insight that P2 spends a lot of time not only in the present moment, but in the state of Csikszentmihályi's flow.

In reflection, the interview with P2 was characteristic of my example of speaking or teaching and deep conversations regarding my similar experiences to creating a mandala, for which I wrote the following, "Connecting and speaking with one person brings me into the present moment, and I see images and feel words move through me

like they do when I am writing or otherwise focused on creating something. Connecting in a deep conversation is like speaking to a group on an intimate level that is more focused on listening and seeing the other person's images. I am only aware of the other person and myself, and I am oblivious to my surroundings." Thus suggesting that P2 and I were in a state of creative flow, or an intense mindful focus, during the interview.

P3 Transformation

Reading the transcribed descriptions from P3's interview as a whole portrayed the contour of passion. Having previously transformed the data for a direct, concrete participant and an abstract, free flowing participant, listening to the interview with P3 conveyed a balance between the other two participants in regard to her presentation. Her emphasis on the importance of color and her thrusting drive to create confirmed her essential passion for living mindfully and creatively. I had recorded the interviews on my laptop as videos with only me in the picture, which allowed me to see my expressions in reaction to certain responses made by P3. I noticed that I smiled in recognition of repeated data patterns from the previous two interviews when P3 began talking about color, and I smiled again when she brought up being a child. Discerning the meaning units for P3 was seamless as I had gained some expertise discerning meaning units from the other participants' interview data. I stayed in the present moment by noticing my breath to embrace and fully experience the unique quality of P3's recorded interview on its own without comparison, which would come later.

I remembered the excitement in P3's eyes that matched the timbre of her voice. I envisioned her expression of sadness as she related feelings of depression resulting from the idea of her not being able to create. I was aware that P3's enthusiasm was just as infectious for me listening to the recording of her voice as it was for me on the day that I interviewed her.

P3's drive to create reminded me of what I expressed about my example of writing in my similar experiences to creating a mandala, for which I wrote the following, "When writing, I lose sense of everything around me, and I am lost in the world I am writing about. Writing is a creative thrust. I feel compelled to write. It is my passion, and I feel entranced and intuitively guided when I am writing. I feel like the house could fall down around me and I would not notice."

My Journey

My passionate trust in creativity as a healing force that is one and the same with the creator consciousness of the kosmos was inherent. I began my graduate studies winter quarter 2011 with the idea that I would research creativity. This was my week one main post in fundamentals.

> For the past fifteen years, I have been employed in the human services field. My strengths are compassion, clarity, and creativity. I come from a place of kindness, I listen and understand the issue, and I use creativity to seek and find the solution. This practice builds trust and mutual respect, has served many, and will remain my approach in the future.

I am passionate about researching the development of the creative aspects needed to find solutions, explore artistic expression, as well as to create joy and harmony on a personal and societal level. I want to focus my research in the area of acquired variability and the cognitive processes therein which allow an individual or a group to develop the creative aspects needed to find solutions, express themselves artistically, as well as to create joy and harmony.

One of my biggest challenges was developing the study's problem statement. I am solution focused and see all challenges as opportunities. I owe my problem statement to my granddaughter who, at that time, was in kindergarten. It was a cold rainy morning and we did our usual rush to get her dressed and in the car. Despite my frantic hurry in bad weather, I got her to school five minutes late. She went to the door, and it was locked. I was upset, but I was grateful that I had waited instead of driving off before she got in. It was the school's rule to lock children out five minutes after the bell.

My problem statement emerged some months later as an epiphany. The idea of it was that children start their school days with stress due to early start times and strict rules about tardiness. Stress and conforming to rules hindered creativity, and MM could be a solution to the problem.

Social Implications and Recommendations

The dynamic shifts in technology and commerce that made creativity the most valued and sought skill in the workplace triggered priorities in U.S. education to change (Davenport & Pagnini, 2016). The change began at the graduate level as instructional

designs evolved from the traditional roles of professing knowledge to facilitating graduate students' self-regulated learning (McKeachie, 2011), which then would be passed forward through the graduates' facilitating their students' self-regulated learning.

Self-regulation of attention is the core mechanism of MM (Kabat-Zinn, 1994; Langer, 1989). Applied toward learning, mindful self-regulation of attention prompted divergent thinking and noticing of novel distinctions through moment-to-moment focus and open awareness (Langer, 1997). By opening to novelty and integrating diverse multiple perspectives, critical thinking was engaged and alternative solutions were created (Langer, 1997).

Psychological and Social Implications

MM served as a conduit for creativity. Contrasting and similar accounts of participants' lived experiences enriched the literature regarding MM's role in achieving flow, and provided lived examples of MM and creativity being synonymous and neuropsychologically identical. Insights regarding MM longevity were garnered through participants' individual differences. Long-term MM practicing participants' lived creative experiences contrasted with short-term MM practicing participant's lived experiences creating. Long-term MM practitioners were creatives and short-term was not. Berkovich-Ohana et al. (2017) said that long-term MM practicing individuals had higher creative thinking scores and reduced mindlessness when compared to short-term MM practicing individuals.

Having creative intent, using imagination, and thinking in novel ways was an everyday habit, and MM, as a mindful state, was also an everyday habit for creatives. The theme of childhood was associated with experiencing flow. Heightened creativity was shown to have developed in childhood through the internal and external environments that Rogers (1954), Sternberg (2012), and Csikszentmihályi (1997) proposed, and the internal psychological characteristics of openness to new experiences, self-regulation, flexibility, drive, and curiosity were distinctive to creatives in the study. Neffe (2007) stated, "Creative people are propelled by a high-octane motor: the sheer force of will. They feel the overwhelming need to be creative, and are distinguished by their determination and boundless perseverance," (p. 262). MM's core mechanism was self-regulated attention, meaning that paying attention and noticing things as new through moment-to-moment awareness promoted curiosity, flexibility, and imagination.

Participants described experiencing flow as feeling happy and free from worry like a child, and they were reminded of their childhoods when they were free to express themselves. Patterned routines and social pressures to conform were described as discouraging children's natural abilities to express themselves. Sternberg (2012) said that creativity typically developed in childhood as a habit that could be promoted or discouraged and that pressures to conform to society discouraged its development.

P1 focused deeply on coloring his mandala. He blended colors to please the eye and was surprised by the beauty of his creation. P1's accounts regarding his lived experience of creating a mandala offered insight into how MM can work as a solution to

creativity's discouragement. In experiencing present moment awareness practicing MM, P1's consciousness was opened to experiencing flow through moment-to-moment focus, and in achieving transcendence merged with creative force, P1 felt more imaginative, more productive, and free to express himself creatively.

Recommendations

Some private K-12 schools in the U.S. have enlisted MM to reduce stress and increase learning, and some public K-12 schools are using MM for behavioral interventions (Davenport & Pagnini, 2016; LaRock, 2014). It needs to be widespread knowledge that bringing MM into all U.S. K-12 schools, for both teachers and students, offers an integrated modality to increased creativity, communication, collaboration, and critical thinking, the four Cs, and MM increases the fifth C, compassion.

Aside from this study, there has been little to no qualitative inquiry exploring creativity and MM together. Future qualitative studies regarding the topic of MM and creativity's relationship are recommended to enrich current literature and address the existing gap. Transferability to the general population of MM practitioners in the U.S. may have been limited by the small number of participants in the study. Participants may not be representatives of the general population of MM practitioners. Studies that specifically validate the efficacy or quality of opening up children and all people to their unique, creative wellsprings through practicing MM or further enrich understanding MM's role in enhancing creativity are also recommended.

Mindfulness in Schools Search Results

As of July 28, 2018, Google search for *mindfulness in schools* had about 24,600,000 results (0. 55 seconds) and about 59,400 results (0. 11 sec) in Google Scholar. A search for *mindfulness in schools conference 2018* had about 11,600,000 results (0. 37 seconds) and about 18,800 results (0. 08 sec) in Google Scholar. A search for *mindfulness in schools worldwide* yielded about 2,470,000 results (0. 42 seconds) and about 12,000 results (0. 03 sec) in Google Scholar.

Creativity and Mindfulness Current Research

The topic of creativity and its relationship to MM has been approached using more quantitative methods. There is a gap in research literature regarding using qualitative inquiry to explore the topic of creativity and MM. Examples of research that further investigated the inferred causal direction and positive correlations between creativity and MM, and studies that explored ascribed qualities of creativity and MM that took place during the completion of this study were respectively mentioned and briefly discussed.

Quantitative

Agnoli, Vanucci, Pelagatti, and Corazza (2018), Müller, Gerasimova, and Ritter (2016), and Sundararajan and Fatemi (2016) examined MM and creativity in regard to MM‘s influences related to creative thinking and performance using various investigative approaches that addressed modes of MM and modes of creativity, such as looking into OM and FA types of MM in relation to divergent and convergent types of creativity. A gap in the literature was identified by Colzato et al. (2014) regarding the effects of MM

practice longevity towards creativity. Berkovich-Ohana, Glicksohn, Ben-Soussan, and Goldstein (2017) tested MM practice longevity in regard to the neuropsychological relationship between MM creativity. Their hypothesis was that creativity, as divergent thinking, could be dependent upon reduced mindlessness or default mode network (DMN) resting state activity. They found that long-term MM practitioners had higher divergent thinking scores and lower DMN resting state activity than the short-term MM practitioners and the control group did. Short-term MM practitioners had higher divergent thinking scores and lower DMN resting state activity than did the control group. Findings suggested that long-term MM practice was linked to greater divergent thinking in relation to creative expertise and that divergent thinking was negatively correlated with mindlessness or DMN resting state activity. Berkovich-Ohana et al. found a reduced DMN to creativity connection.

Berkovich-Ohana et al. (2017) provided support for Langer's mindfulness-mindlessness-creativity connection and direction for Horan's neuropsychological creativity and MM correlations. In exploring lived experiences of creating for MM practitioners in this study, insights regarding MM longevity were garnered through participants' individual differences and similarities. Long-term MM practitioners' creative experiences in contrast with short-term MM practitioner's experiences creating, served to enrich Berkovich-Ohana et al. (2017), which reported that long-term MM practicing individuals had higher creative thinking scores and reduced mindlessness when compared to short-term MM practicing individuals.

Qualitative

Inquiries included a case study at a primary charter school and a phenomenological study at a university undergraduate narrative arts class. Davenport and Pagnini (2016) described Langerian mindfulness as being instrumental in improving the four C's: creativity, collaboration, critical thinking, and communication for first graders. Jones (2014) explored lived experiences of undergraduate students that were unable to write what they knew until they practiced present moment body awareness using MM body scans.

Conclusion

In being habitually mindful and living from my heart, the entire unfoldment from the study's conception onward was synchronistic, holistic, and synergistic. Completing the study and attending to life's challenges bolstered conscious connection and mind-body-spirit alignment. My capacity for acceptance, kindness, compassion, and gratitude expanded, and like my life, the study has come full circle.

The purpose of the study was to enrich and further understand MM's role in creative enhancement. As I sought to gain understanding of a phenomenon, the purpose dictated the phenomenological method. I approached the study through an integral lens, and I was drawn to Giorgi's method of descriptive transcendental phenomenology. I later learned that Husserl, who was the creator of phenomenology, had brought mindfulness to the western world and that phenomenology was based on mindfulness.

As a daily practice, I assumed Husserl's transcendental phenomenological state of conscious awareness before learning that it was MM. From an integral perspective, I wanted to understand creativity, which is synonymous with mindfulness. My interest in creativity was in regard to its being enhanced by MM, which is neuropsychologically identical to creating. I intuitively chose Giorgi's Husserlian method before learning that Husserl brought mindfulness to the western world as the basis for phenomenology. I conducted a conceptually integrated study regarding creativity and mindfulness, and I felt confident that using a descriptive, transcendental phenomenological methodology was the best approach.

Participants' lived meanings shaped the essential psychological structure of lived experiences of creating and fulfilled the study's purpose. The accounts of these three mindful participants provided insights and deeper realizations into how individuals who practice MM felt about and ascribed meanings to lived experiences of creating. The integral essence of flow, transcendent integration, and MM were holistic and constituted the structure. Findings supported and enriched reviewed literature regarding theoretical frameworks of creativity and mindfulness and their conceptual integration.

Creativity is the most desired and valued attribute in the workplace (Davenport & Pagnini, 2016). Along with an increase in standardized testing in U.S. primary and secondary education, there is a decrease in creativity for U.S. K-12 students (Davenport & Pagnini2016; Sternberg, 2012). Therefore, the importance of bringing MM into all K-12 schools as a solution toward decreased creativity levels is imperative. MM offers an

integrated modality to increased creativity, communication, collaboration, and critical thinking, the four Cs. In addition, MM increases the fifth C, compassion.

Understanding creativity in this context serves to support MM in the next step, which is using MM as a practical application in all U.S. public and private primary and secondary schools. For example, at the beginning of class teacher and students sit quietly in their chairs listening to a ten minute guided MM, and begin by noticing the breath. Paying attention in the moment to the natural rhythm of the breath. Inviting kindness and curiosity in this moment. Thus centering, calming, and focusing teacher's and students' attention to the present moment, and opening them to their wellsprings of unique creative potentials.

References

Agnoli, S., Vanucci, M., Pelagatti, C., & Corazza, G. E. (2018). Exploring the link between mind wandering, mindfulness, and creativity: A multidimensional approach. *Creativity Research Journal, 30(1),* 41-53. doi:10. 1080/10400419. 2018. 1411423

Baas, M., Nevicka, B., & Ten Velden, F. S. (2014). Specific mindfulness skills differentially predict creative performance. *Personality and Social Psychology Bulletin, 9,* 1092–1106.

Baird, B., Smallwood, J., Mrazek, M. D., Kam, J. W. Y., Franklin, M. S., & Schooler, J. W. (2012). Inspired by distraction: Mind wandering facilitates creative incubation. *Psychological Science, 23,* 1117–1122. http://dx. doi.org/10. 1177/0956797612446024.

Ball, O. E. (1980). The effect of TM and the TM-Sidhi program on verbal and figural creativity (TTCT), auditory creativity (S and I), and hemispheric dominance (SOLAT). Atlanta, GA: University of Georgia.

Banfield, J., & Burgess, M. (2013). A phenomenology of artistic doing: Flow as embodied knowing in 2D and 3D professional artists. *Journal of Phenomenological Psychology, 44(1),* 60-91.

Berkovich-Ohana, A., Glicksohn, J., Ben-Soussan, T. D., & Goldstein, A. (2017). Creativity Is Enhanced by Long-Term Mindfulness Training and Is Negatively Correlated with Trait Default-Mode-Related Low-Gamma Inter-Hemispheric Connectivity. *Mindfulness, 8(3),* 717-727.

Black, D. S., & Fernando, R. (2014). Mindfulness training and classroom behavior among lower-income and ethnic minority elementary school children. *Journal of Child and Family Studies, 23(7),* 1242-1246. doi:10. 1007/s10826-013-9784-4

Blomdahl, C., Gunnarsson, A. B., Guregård, S., & Björklund, A. (2013). A realist review of art therapy for clients with depression. *The Arts in Psychotherapy, 40(3),* 322-330.

Brayboy, J. P. (2014). Mindfulness study explores way for soldiers to manage stress. Retrieved from:http://www.army.mil/article/127523/Mindfulness_study_explores_way_for_Soldiers_to_manage_stress/

Breedlove, S. M., Watson, N. V., & Rosenzweig, M. R. (2010). *Biological psychology: An introduction to behavioral, cognitive, and clinical neuroscience. (6th ed.)* Sunderland, MA: Sinauer Associates, Inc. Publishers.

Brinkmann, S., & Kvale, S. (2005). Confronting the ethics of qualitative research. *Journal of Constructivist Psychology, 18(2),* 157-181. doi:10. 1080/10720530590914789

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84,* 822–848. doi:10. 1037/0022-3514. 84. 4. 822

Brown, L. F., Davis, L. W., LaRocco, V. A., & Strasburger, A. (2010). Participant perspectives on mindfulness meditation training for anxiety in schizophrenia. *American Journal of Psychiatric Rehabilitation, 13(3),* 224-242. doi:10. 1080/15487768. 2010. 501302

Caddy, L. L., Crawford, F. F., & Page, A. C. (2012). 'Painting a path to wellness': Correlations between participating in a creative activity group and improved measured mental health

outcome. *Journal of Psychiatric and Mental Health Nursing, 19(4),* 327-333. doi:10. 1111/j. 1365-2850. 2011. 01785. x

Capurso, V., Fabbro, F., & Crescentini, C. (2014). Mindful creativity: The influence of mindfulness meditation on creative thinking. *Frontiers in Psychology, 4* doi:10. 3389/fpsyg. 2013. 01020

Carson, S. (2014) The Impact of Mindfulness on Creativity Research and Creativity Enhancement, in *The Wiley Blackwell Handbook of Mindfulness* (eds A. Ie, C. T. Ngnoumen and E. J. Langer), John Wiley & Sons, Ltd, Chichester, UK. doi: 10. 1002/9781118294895. ch18

Carson, S. H., & Langer, E. J. (2006). Mindfulness and self-acceptance. *Journal of Rational Emotive & Cognitive-Behavior Therapy, 24,* 29 –43.

Carson, S. H., Peterson, J. B., & Higgins, D. M. (2003). Decreased latent inhibition is associated with increased creative achievement in high-functioning individuals. *Journal of Personality and Social Psychology, 85,* 499–506.

Carson, S. H., Peterson, J. B., & Higgins, D. M. (2005). Reliability, validity, and factor structure of the Creative Achievement Questionnaire. *Creativity Research Journal, 17,* 37 –50.

Casakin, H. & Kreitler, S. (2010). The cognitive profile of creativity in design. *Thinking Skills and Creativity 6(3),* 159-168. Retrieved from: http://dx.doi.org.ezp.waldenulibrary.org/10.1016/j.tsc.2011.06.001

Colzato, L. S., Ozturk, A., & Hommel, B. (2012). Meditate to create: the impact of focused-attention and open-monitoring training on convergent and divergent thinking. *Frontiers in psychology*, *3*. 116.

Colzato, L. S., Szapora, A., Lippelt, D., & Hommel, B. (2014). Prior meditation practice modulates performance and strategy use in convergent-and divergent-thinking problem. *Mindfulness.* http://dx.doi.org/10.1007/s12671-014-0352-9 (online publication ahead of print).

Colzato, L. S., Szapora, A., Lippelt, D., & Hommel, B. (2014). Prior meditation practice modulates performance and strategy use in convergent-and divergent-thinking problems. *Mindfulness*, 1-7.

Cortright, B. (2010). Psychotherapy and spirit: Theory and practice in transpersonal psychology. Albany, NY: SUNY Press. Kindle Edition.

Csikszentmihályi, M. (1997). *Flow and the psychology of discovery and invention.* HarperPerennial, New York, 39.

Cornelis, J. (2014). *World of mandalas coloring book (1st ed.).* jAPPS. Retrieved from http://www. printmandala.com/

Cortright, B. (2010). Psychotherapy and spirit: Theory and practice in transpersonal psychology. Albany, NY: SUNY Press. Kindle Edition.

Cowger, E. L. (1974). The effects of meditation (zazen) upon selected dimensions of personality development. *Dissertation Abstracts International*, *34*, 8–A, Part 1, 4734.

Cowger, E. L., & Torrance, E. P. (1982). Further examination of the quality of changes in creative functioning resulting from meditation (zazen) training. *Creative Child and Adult Quarterly, 7*, 211-217.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.}.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches (3rd ed.}*. Thousand Oaks, CA: Sage Publications, Inc.

Curry, N. A., & Kasser, T. (2005). Can coloring mandalas reduce anxiety? *Art Therapy, 22(2),* 81-85.

Davenport, C., & Pagnini, F. (2016). Mindful learning: A case study of Langerian mindfulness in schools. *Frontiers In Psychology, 7*

Delis, D. C., Lansing, A., Houston, W. S., Wetter, S., Han, S. D., Jacobson, M., . . . & Kramer, J. (2007). Creativity lost: The importance of testing higher-level executive functions in school-age children and adolescents. *Journal of Psychoeducational Assessment, 25(1),* 29-40.

Demick, J. (2000). Toward a mindful psychological science: Theory and application. *Journal of Social Issues, 56(1),* 141–159.

Dewey, A., Steinberg, H., & Coulson, M. (1998). Conditions in which British artists achieve their best work. *Creativity Research Journal, 11(4),* 275-282. doi:10. 1207/s15326934crj1104_1

Ding, X., Tang, Y., Deng, Y., Tang, R., & Posner, M. I. (2015). Mood and personality predict improvement in creativity due to meditation training. *Learning and Individual Differences, 37,* 217 –221.

Ding, X., Tang, Y., Tang, R., & Posner, M. I. (2014). Improving creativity performance by short-term meditation. *Behavioral and Brain Functions, 10*. http://dx. doi.org/10. 1186/1744. 9081. 10. 9 online publication ahead of print.

Ding, X., Tang, Y. Y., Tang, R., & Posner, M. I. (2014). Improving creativity performance by short-term meditation. *Behavioral and Brain Functions, 10(9),* 1-8.

Domino, G. (1977). Transcendental meditation and creativity: An empirical investigation. *Journal of Applied Psychology, 62(3),* 358-362. doi:10. 1037/0021-9010. 62. 3. 358

DeRobertis, E. M. (2014). Adult recollections of becoming creative as a child: An empirical-phenomenological field oriented investigation. *The Humanistic Psychologist, 42(2),* 137-154. doi:10. 1080/08873267. 2013. 843532

Egri, C. P. (2012). Introduction: Enhancing business education through creativity, mindfulness, and accreditation. *Academy of Management Learning & Education, 11(4),* doi:10. 5465/amle. 2012. 0350

Elkis-Abuhoff, D., Gaydos, M., Goldblatt, R., Chen, M., & Rose, S. (2009). Mandala drawings as an assessment tool for women with breast cancer. *The arts in psychotherapy, 36(4),* 231-238.

Eysenck, H. J. (1995). *Genius: The natural history of creativity*. Cambridge, England: Cambridge University Press.

Felder, A. J., Aten, H. M., Neudeck, J. A., Shiomi-Chen, J., & Robbins, B. D. (2014). Mindfulness at the heart of existential-phenomenology and humanistic psychology: A century of contemplation and elaboration. *The Humanistic Psychologist, 42(1),* 6-23. doi:10.1080/08873267.2012.753886

Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences (7th ed.}.* New York: Worth.

Freud, S. (1994). *Civilization and its discontents* (J. Riviere, Trans.). New York: Dover.

Gallate, J., Wong, C., Ellwood, S., Roring, R. W., & Snyder, A. (2012). Creative people use nonconscious processes to their advantage. *Creativity Research Journal, 24(2-3),* 146-151. doi:10. 1080/10400419. 2012. 677282

Grant, A. M., Langer, E. J., Falk, E., & Capodilupo, C. (2004). Mindful creativity: Drawing to draw distinctions. *Creativity Research Journal, 16(2-3),* 261-265. doi:10. 1207/s15326934crj1602&3_9

Greenberg, J., Reiner, K., & Meiran, N. (2012). "Mind the trap": Mindfulness practice reduces cognitive rigidity. *PLoS ONE, 7.* http://dx.doi.org/10.1371/journal.pone.0036206 (e36206).

Giorgi, A. (2009). The descriptive phenomenological method in psychology: A modified Husserlian approach. Pittsburgh, PA: Duquesne University Press.

Griffiths, K., Camic, P. M., and Hutton, J. M. (2009). Participant experiences of a mindfulness-based cognitive therapy group for cardiac rehabilitation. *Journal of Health Psychology, 14*(5), 675–681.

Gute, G., Gute, D. S., Nakamura, J., & Csikszentmihályi, M. (2008). The early lives of highly creative persons: The influence of the complex family. *Creativity Research Journal, 20(4),* 343-357. doi:10.1080/10400410802391207

Haigh, E., Moore, M., Kashdan, T., & Fresco, D. (2010). Scale examination of the factor structure and concurrent validity of the Langer mindfulness/mindlessness. Retrieved from: http://asm.sagepub.com/content/18/1/11

Hart, R., Ivtzan, I., & Hart, D. (2013). Mind the gap in mindfulness research: A comparative account of the leading schools of thought. *Review of General Psychology, 17(4),* 453-466. doi:10. 1037/a0035212

Hauptmann, S. (2005). Structuring audio data with a "C-TOC". An example for analyzing raw data. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 6(1).* Retrieved from: http://www. qualitative-research. net/index. php/fqs/article/view/513/1110

Hayes, S. C., & Plumb, J. C. (2007). Mindfulness from the bottom up: Providing an inductive framework for understanding mindfulness processes and their application to human suffering. *Psychological Inquiry, 18(4),* 242-248. doi:10. 1080/10478400701598314

Heidegger, M. (1938/39). *Besinnung.* M - GA, 1997.

Henderson, P., Rosen, D., & Mascaro, N. (2007). Empirical study on the healing nature of mandalas. *Psychology of Aesthetics, Creativity, and the Arts, 1(3),* 148-154. doi:10. 1037/1931-3896. 1. 3. 148

Henson-Dacey, J. (2015). High school visual art students' perceptions of creativity (Order No. 3722161). Available from Dissertations & Theses @ Walden University. (1720326789).

Hoffman, L., & Calvert, C. (2007). Review of 'Evolutionary and neurocognitive approaches to aesthetics, creativity and the arts'. *Psychology of Aesthetics, Creativity, and the Arts, 1(4),* 252-254. doi:10. 1037/1931-3896. 1. 4. 252

Horan, R. (2009). The neuropsychological connection between creativity and meditation. *Creativity Research Journal, 21(2-3),* 199-222. doi:10. 1080/10400410902858691

Ivey, A., Ivey, M., & Zalaquett, C. (2010). *Intentional interviewing and counseling: Facilitating client development in a multicultural society*. Nelson Education.

Janesick, V. J. (2010). *"Stretching" exercises for qualitative researchers.* SAGE. .

Jedrczak, E., Beresford, M., & Clements, G. (1985). The TM-Sidhi program, pure consciousness, creativity and intelligence. *The Journal of Creative Behavior, 19,* 270–275.

Jones, M. (2014). To write what you know: Embodiment, authorship and empathy. *Sensoria: A Journal Of Mind, Brain & Culture, 10(1),* 49-56. doi:10. 7790/sa. v10i1. 388

Julmi, C., & Scherm, E. (2015). The Domain-Specificity of Creativity: Insights from New Phenomenology. *Creativity Research Journal, 27(2),* 151-159.

Jung, C. G. (2001). *Modern man in search of a soul.* New York: Routledge.

Justo, F. C. (2009). Efectos de un programa de meditación sobre los niveles de creatividad verbal sobre un grupo de alumnos/asdeba chillerato [Effects of a meditation program on verbal creative levels in a group of students in late secondary education]. *Suma Psicológica, 16,* 113 –120.

Kabat-Zinn, J. (2009). *Forward. In F. Dinonna (Ed.}, Clinical handbook of mindfulness* (pp. xxv–xxxiii). New York, NY: Springer.

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life.* New York, NY: Hyperion.

Kabat-Zinn, J., Massion, A. O., Kristeller, J., Peterson, L. G., Fletcher, K., Pbert, L.,. . . Santorelli, S. F. (1992). Effectiveness of a meditationbased stress reduction program in the treatment of anxiety disorders. *The American Journal of Psychiatry, 149,* 936 –943.

Kershner, J. R., & Ledger, G. (1985). Effect of sex, intelligence, and style of thinking on creativity: A comparison of gifted and average IQ children. *Journal of Personality and Social Psychology, 48(4),* 1033-1040. doi:10. 1037/0022-3514. 48. 4. 1033

Klco, S. E. (2010). A neuropsychological examination of the effects of mindfulness meditation in elementary school children (Order No. 1484644). Available from ProQuest Dissertations & Theses Global. (305207671).

Langer, E. (1983). *The psychology of control.* Beverly Hills: Sage Publications.

Langer, E., Djikic, M., Pirson, M., Madenci, A., & Donohue, R. (2010). Believing is seeing: Using mindlessness (mindfully) to improve visual acuity. *Psychological Science, 21,* 661– 666. doi:10. 1177/0956797610366543

Langer, E., Pirson, M., & Delizonna, L. (2010). The mindlessness of social comparisons. *Psychology of Aesthetics, Creativity, and the Arts, 4(2),* 68-74. doi:10. 1037/a0017318

Langer, E. J. (2009). *Counterclockwise: Mindful health and the power of possibility.* Ballantine Books.

Langer, E. J. (1989). *Mindfulness.* Cambridge, MA: Da Capo Press.

Langer, E. J. (2014). *Mindfulness.* Cambridge, MA: Da Capo Press.

Langer, E. J. (2006). *On becoming an artist: Reinventing yourself through mindful creativity.* New York, NY: Ballantine Books.

Langer, E. J. (1997). *The power of mindful learning.* Cambridge, MA: De Capo Press.

Langer, E. J., Hatem, M., Joss, J., & Howell, M. (1989). Conditional teaching and mindful learning: The role of uncertainty in education. *Creativity Research Journal, 2,* 139 –150. doi:10. 1080/10400418909534311

Langer, E. J., & Imber, L. G. (1979). When practice makes imperfect: Debilitating effects of overlearning. *Journal of Personality and Social Psychology, 37,* 2014–2024. doi:10. 1037/0022-3514. 37. 11. 2014

LaRock, B. (2014). Mindfulness in K-12 education: Transforming students, schools, and educational leadership (Order No. 3582010). Available from ProQuest Dissertations & Theses Global. (1655369554).

Lasch, K. E., Marquis, P., Vigneux, M., Abetz, L., Arnould, B., Bayliss, M., & . . . Rosa, K. (2010). PRO development: Rigorous qualitative research as the crucial foundation.

Quality Of Life Research: An International Journal of Quality Of Life Aspects of Treatment, Care & Rehabilitation, 19(8), 1087-1096. doi:10. 1007/s11136-010-9677-6

Lebuda, I., Zabelina, D. L., & Karwowski, M. (2015). Mind full of ideas: A meta-analysis of the mindfulness–creativity link. *Personality and Individual Differences, 93*, 22-26.

Lenze, E. J., Hickman, S., Hershey, T., Wendleton, L., Ly, K., Dixon, D., Dore, P., Loebach Wetherell, J. (2014). Mindfulness-based stress reduction for older adults with worry symptoms and co-occurring cognitive dysfunction. *International Journal of Geriatric Psychiatry, 29(10),* 991-1000.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research, 4*, 97-128.

Lutz, A., Dunne, J. D., & Davidson, R. J. (2007). Meditation and the neuroscience of consciousness: An introduction. In P. Zelazo, M. Moscovitch, & E. Thompson (Eds.), *The Cambridge handbook of consciousness* (pp. 499–551). New York, US: Cambridge University Press.

Lutz, A., Jha, A. P., Dunne, J. D., & Saron, C. D. (2015). Investigating the phenomenological matrix of mindfulness-related practices from a neurocognitive perspective. *American Psychologist, 70(7),* 632-658. doi:10. 1037/a0039585

McClary, R. (2007). Healing the psyche through music, myth, and ritual. *Psychology of Aesthetics, Creativity, and the Arts, 1(3),* 155-159. doi:10. 1037/1931-3896. 1. 3. 155

Mindfulness, Biofeedback, and Coloring (nd.). Retrieved from: https://www. astate. edu/college/education/services/arkansas-science-festival/calendar/asf-mindfulness-session-event-details. dot

Mindfulness Meditation (2016) retrieved from: http://ittcblog. astate. edu/wordpress/?p=106

Mooneyham, B. W., & Schooler, J. W. (2013). The costs and benefits of mind-wandering: A review. *Canadian Journal of Experimental Psychology, 7,* 11 –18.

Moore, A., & Malinowski, P. (2009). Meditation, mindfulness, and cognitive flexibility. *Consciousness and Cognition, 18,* 176 –186.

Müller, B. N., Gerasimova, A., & Ritter, S. M. (2016). Concentrative meditation influences creativity by increasing cognitive flexibility. *Psychology Of Aesthetics, Creativity, And The Arts, 10(3),* 278-286. doi:10. 1037/a0040335

Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin, 126,* 247–259. doi:10. 1037/0033-2909. 126. 2. 247

Nanda, J. (2009). Mindfulness: A lived experience of existential-phenomenological themes. *Existential Analysis, 20(1),* 147-162.

Neffe, J. (2007). *Einstein: A biography*. Macmillan. Kindle Edition.

Nelson, B., & Rawlings, D. (2007). Its own reward: a phenomenological study of artistic creativity. *Journal of Phenomenological Psychology, 38(2),* 217-255.

Nelson, B., & Rawlings, D. (2009). How does it feel? The development of the experience of creativity questionnaire. *Creativity Research Journal, 21(1),* 43-53.

Neubert, S. (2001). Pragmatism and constructivism in contemporary philosophical discourse. *Accessed Nov, 2, 2013.*

Neubert, S. & Reich, K. (2006). The Challenge of Pragmatism for Constructivism: Some Perspectives in the Programme of Cologne Constructivism. *The Journal of Speculative Philosophy 20(3),* 165-191. Penn State University Press.

Neuman, W. L. (2006). Social research methods: Qualitative and quantitative approaches (6th ed.}. Boston: Allyn & Bacon.

Nilsson, H. (2014). A four-dimensional model of mindfulness and its implications for health. *Psychology of Religion and Spirituality, 6(2),* 162-174. doi:10. 1037/a0036067

O'Haire, T. D., & Marcia, J. E. (1980). Some personality characteristics associated with ananda marga meditators: A pilot study. *Perceptual and Motor Skills, 51,* 447–452.

Onwuegbuzie, A. J., & Leech, N. L. (2007). A call for qualitative power analyses. *Quality & Quantity, 41(1),* 105-121.

Onwuegbuzie, A. J., & Leech, N. L. (2007a). Sampling Designs in Qualitative Research: Making the Sampling Process More Public. *The Qualitative Report, 12(2),* 238-254. Retrieved from: http://nsuworks. nova. edu/tqr/vol12/iss2/7

Orme-Johnson, D. W., Clements, G., Haynes, C. T., & Badaoui, K. (1977). Higher states of consciousness: EEG coherence, creativity, and experiences of the sidhis. In D. W. Orme-Johnson & J. T. Farrow (Eds.). *Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi Program, collected papers* (Vol. 1, pp. 705–712). New York: MERU Press.

Orme-Johnson, D. W., & Granieri, B. (1977). The effects of the age of enlightenment governor training courses on field independence, creativity, intelligence, and behavioral flexibility. In D. W. Orme-Johnson & J. T. Farrow (Eds.), *Scientific research on Maharishi's Transcendental Meditation and TM-Sidhi Program, collected papers* (Vol. 1, pp. 713–718). New York: MERU Press.

Orme-Johnson, D. W., & Haynes, C. T. (1981). EEG phase coherence, pure consciousness, creativity, and the TM-sidhi experiences. *Neuroscience, 13,* 211–217.

Osborne, J. & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation, 8*(2), 1-9.

Ostafin, B. D., & Kassman, K. T. (2012). Stepping out of history: Mindfulness improves insight problem solving. *Consciousness and Cognition, 21,* 1031 –1036.

Otis, L. S. (1974). The facts on transcendental meditation: III. If well-integrated but anxious, try TM. *Psychology Today, 7,* 45–46.

Overbaugh, R. C. & Schultz, L. (n. d.). Old Dominion University. Blooms Taxonomy. Retrieved from: http://ww2. odu. edu/educ/roverbau/Bloom/blooms_taxonomy. htm

Primi, R. (2014). Divergent productions of metaphors: Combining many-facet Rasch measurement and cognitive psychology in the assessment of creativity. *Psychology of Aesthetics, Creativity, and the Arts, 8(4),* 461-474. doi:10. 1037/a0038055

Purser, R. (2014). The militarization of mindfulness. Retrieved from: http://www. inquiringmind.com/Articles/MilitarizationOfMindfulness. html

Ren, J., Huang, Z. H., Luo, J., Wei, G. X., Ying, X. P., Ding, Z.,. . . Luo, F. (2011). Meditation promotes insightful problem-solving by keeping people in a mindful and alert conscious state. *Science China. Life Sciences, 54,* 961 –965.

Reynolds, P. D. (2010). *A primer in theory construction* (Laureate Education, Inc., custom ed.}. Boston, MA: Pearson Education.

Rich, J. J., Colon, A. N., Mines, D., & Jivers, K. L. (2014). Creating learner-centered assessment strategies for promoting greater student retention and class participation. *Frontiers in Psychology, 5,* 595.

Rogers, C. R. (1954). Towards a theory of creativity. ETC: *A Review of General Semantics, 11,* 249–260.

Runco, M. A. (2014). Creativity: Theories and themes: Research, development, and practice. Elsevier.

Sabaawi, M. (2004). Review of the mind and the brain: Neuroplasticity and the power of mental force. *Journal of Child and Family Studies, 13(1),* 125-127. doi:10. 1023/B:JCFS. 0000010509. 02098. 4d

Sadler-Smith, E. (2015). Wallas' four-stage model of the creative process: More than meets the eye? *Creativity Research Journal, 27(4),* 342-352.

Sundararajan, L., & Fatemi, S. M. (2016). Creativity and symmetry restoration: Toward a cognitive account of mindfulness. *Journal Of Theoretical And Philosophical Psychology, 36(3),* 131-141. doi:10. 1037/teo0000027

Schneider, D. (2010). ‘Mindfulness’ helps soldiers cope in Iraq. Retrieved from: http://www. defense. gov/news/newsarticle. aspx?id=60294

Sen, R., & Sharma, N. (2011). Through multiple lenses: Implicit theories of creativity among Indian children and adults. *The Journal of Creative Behavior, 45(4),* 273-302. doi:10. 1002/j. 2162-6057. 2011. tb01431. x

Singal, J. (2014). Mindfulness meditation could help stressed-out soldiers. Retrieved from: http://nymag.com/scienceofus/2014/05/meditation-could-help-soldiers-de-stress. html

Sipe, W. B., & Eisendrath, S. J. (2012). Mindfulness-based cognitive therapy: Theory and practice. *The Canadian Journal Of Psychiatry / La Revue Canadienne De Psychiatrie, 57(2), 63-69.*

Soukup, B. (2012). Current issues in the social psychological study of 'language attitudes': Constructionism, context, and the attitude–behavior link. *Language And Linguistics Compass, 6(4),* 212-224. doi:10. 1002/lnc3. 332

Sternberg, R. J. (2012). The assessment of creativity: An investment-based approach. *Creativity Research Journal, 24(1),* 3-12. doi:10. 1080/10400419. 2012. 652925

Sternberg, R. J., & Lubart, T. I. (1996). Investing in creativity. *American Psychologist, 51,* 677–688.

Tang, Y. Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., … Posner, M. I. (2007). Short-term meditation training improves attention and self-regulation. *Proceedings of the National Academy of Sciences of the United States of America, 104(43),* 17152–17156. http://doi.org/10. 1073/pnas. 0707678104

Torrance, E. (1981). Torrance Tests of Creative Thinking. doi:10. 1037/t05532-000

Travis, F. (1979). The transcendental meditation technique and creativity: A longitudinal study of Cornell University undergraduates. *The Journal of Creative Behavior, 13,* 169–180.

van der Vennet, R., & Serice, S. (2012). Can coloring mandalas reduce anxiety? A replication study. *Art Therapy, 29(2),* 87-92.

Ventrella, M. (2016). Mindfulness reflective practice and creative novelty among leaders (Order No. 10144268). Available from ProQuest Dissertations & Theses Global. (1825684058).

Viafora, D. P., Mathiesen, S. G., & Unsworth, S. J. (2014). Teaching mindfulness to middle school students and homeless youth in school classrooms. *Journal Of Child And Family Studies,* doi:10. 1007/s10826-014-9926-3

Visser, F. (2012). *Ken Wilber: thought as passion.* SUNY Press.

Wallas, G. (2014). *The art of thought.* Solis Press: Kent, England.

Walsh, M. (2013). Mindfulness and Creative Performance: Effects of Brief and Sham Mindfulness Meditation on Insight Problem Solving (Doctoral dissertation, Dun Laoghaire Institute of Art, Design and Technology).

Wilber, K. (2000). Integral psychology: Consciousness, spirit, psychology, therapy. Boston: Shambhala.

Wilber, K. (2012). Kosmic creativity introduction to integral life. Retrieved from: https://vimeo.com/38386722

Wilson, C., Secker, J., & Kent, L. (2014). Arts participation, mental well-being and social inclusion: Mixed methods evaluation of an Open Arts studio for people with mental health needs. *Journal of Applied Arts & Health, 5(3),* 341-354.

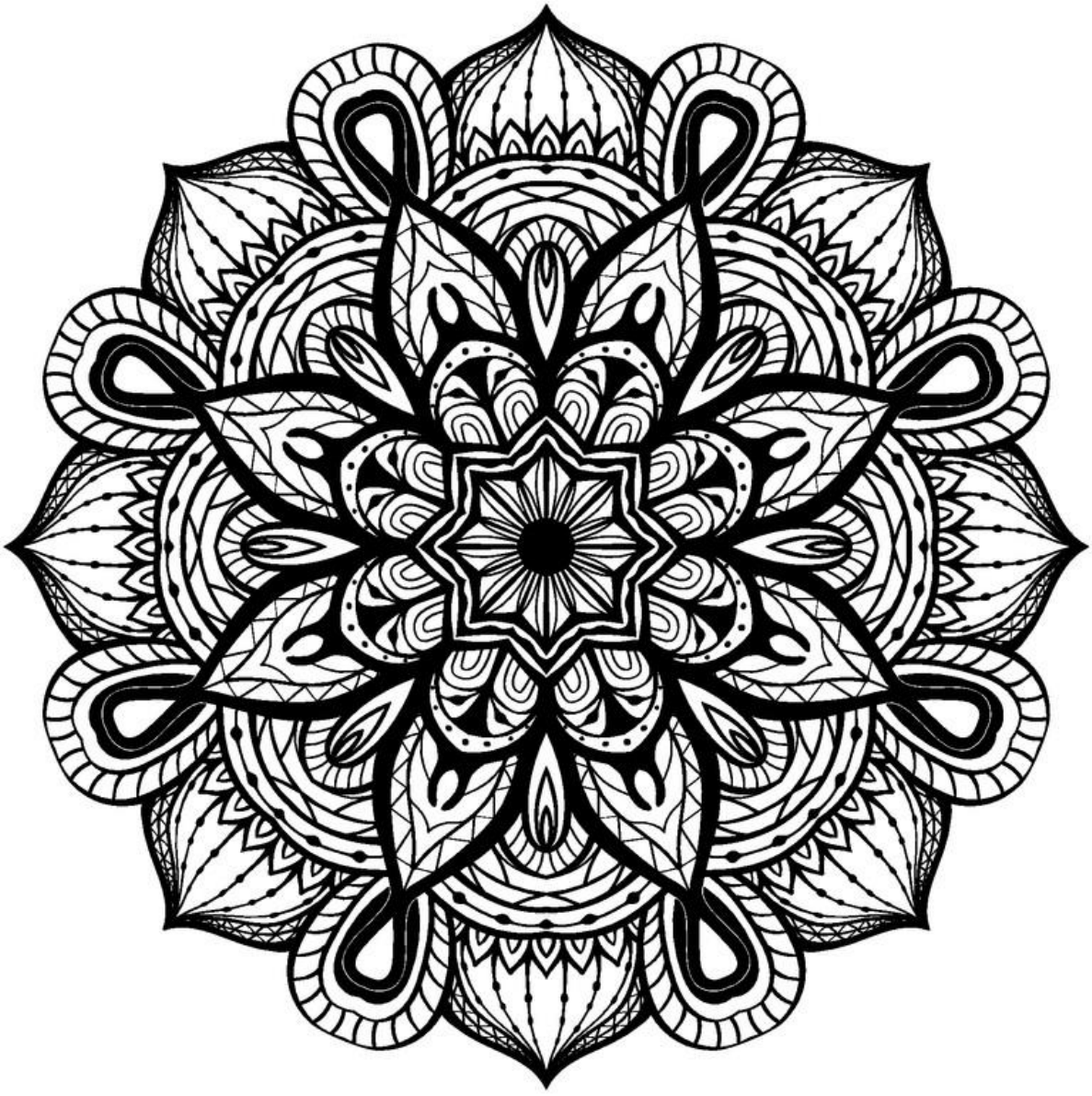
Zabelina, D. L., Robinson, M. D., Ostafin, B. O., & Council, J. C. (2011). Manipulating mindfulness benefits creative elaboration at high levels of neuroticism. *Empirical Studies of the Arts, 29,* 243 –255.

Zajonc, A. (2013). Contemplative pedagogy: A quiet revolution in higher education. *New Directions for Teaching and Learning, 134,* 83-94. doi:10. 1002/tl. 20057

Zedelius, C. M., & Schooler, J. W. (2015). Mind wandering "Ahas" versus mindful reasoning: Alternative routes to creative solutions. *Frontiers in Psychology, 6,* 834. http://dx. doi.org/10. 3389/fpsyg. 2015. 00834.

Zhang, L., & Sternberg, R. J. (2011). Revisiting the investment theory of creativity. *Creativity Research Journal, 23(3),* 229-238. doi:10. 1080/10400419. 2011. 595974

Appendix A: Mandala Task Protocol



Mandala Task and Group Protocol

The mandala coloring experience will take place in a group setting. The mandala was chosen as a task for participants because they are complex yet basic, research has found coloring them to promote balance, coloring them requires no prior artistic experience, and the act of coloring mandalas has been used to exemplify a creative experience (Green & Young, 2015; Henderson et al., 2007; van der Vennet & Serice, 2012). Above is the mandala I plan to use for this task. Before beginning, participants will be reminded that all participation is voluntary and that they are free to withdraw at any time. The mandala coloring exercise will take place directly after participants have participated in a MM (guided meditation) practice. Each participant will be provided with a set of artist grade markers and a sheet of card stock (paper) with the above mandala printed on it. Once participants have been given their mandala and markers, they will be given the opportunity to color it in with markers on their own. Participants will be given ample time for their task; however, completion is not necessary as they will be allowed to take their mandala and their set of markers home with them to finish and keep. Observational notes will be taken by me as to the participants' affect and observed behavior during the mandala coloring portion. If any participant(s) appear to be emotionally upset or distraught at any time during the coloring experience, I will pull him/her aside quietly and ask if he/she wants to continue, if a break is needed, or if she/he feels the need to withdraw from participating.

Appendix B: Interviewing Protocol

Qualitative research is heavily dependent upon language, therefore the linguistic abilities of the researcher and the participants play a role in achieving thick, rich descriptions of a phenomenon (Giorgi, 2009). Thus, it is important for the researcher to understand how to use words that naturally open the mind to receiving and responding so that the flow of the interview is aligned with the flow of the experience or situation being described or related (Ivey, Ivey, & Zalaquett, 2010). Below are open ended, semi-structured, intentional interview questions that are designed to build rapport and a flowing exchange between interviewer and interviewee (Ivey et al., 2010). There are also probing questions designed to dig deeper or help the interviewee if he or she seems stuck. The questions listed here will be used as a guide to allow for flexibility. Active listening and reframing interview techniques, as described in Ivey et al., will be used to clarify participants' descriptions and further elaborate details. I will begin with demographic questions to develop rapport and glean pertinent information about participants.

Observational notes will be taken during the interview to describe affect, posture, gestures, and/or emotional expressions in response to corresponding questions.

Demographics

1. How would you describe your level of education?
2. How would you describe your gender?
3. How would you describe your ethnic-cultural background?

4. How long have you been practicing MM?

5. How would you describe the way you practice MM?

Interview Questions

1. How would you define MM?

2. How would you describe the way being a MM practitioner makes you feel?

3. How would you describe your coloring experience?

4. How would you describe the way coloring made you feel?

5. How would you characterize the meaning of your coloring experience?

6. How would you describe any changes to your state of awareness or any bodily sensations experienced while you were coloring?

7. How would you describe other experiences that seem similar to your coloring the mandala?

8. How would you describe the way ____ made you feel? How would you characterize the meaning of ____? – For each experience given.

Probes

1. Please tell me more about _____?

2. Please describe what you mean by _____?

3. What does it mean to you to feel like _____? Or what does it mean for you to be _____?

4. If you were to know, what would it be?