

Mindfulness in Behavioral Health

Series Editor: Nirbhay N Singh

Catherine Cook-Cottone

Tracy L. Tylka *Editors*

Yoga as Embodied Mindfulness

Integrating Research and Practice



Springer

Mindfulness in Behavioral Health

Editor-in-Chief

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Mindfulness-based therapy is one of the fastest evolving treatment approaches in psychology and related fields. It has been used to treat many forms of psychological and psychiatric distress and medical conditions as well as to foster health and wellness. Early empirical studies and meta-analyses of current research suggest that mindfulness-based therapies are effective and long lasting, but much more data from research and training studies are needed to fully understand its nature and effective practice. The Mindfulness in Behavioral Health series aims to foster this understanding by aggregating this knowledge in a series of high-quality books that will encourage and enhance dialogue among clinicians, researchers, theorists, philosophers and practitioners in the fields of psychology, medicine, social work, counseling and allied disciplines. The books in the series are appropriate for upper level undergraduate and graduate courses. Each book targets a core audience, but also appeals to others interested in behavior change and personal transformation.

Catherine Cook-Cottone • Tracy L. Tylka
Editors

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ISSN 2195-9579

ISSN 2195-9587 (electronic)

Mindfulness in Behavioral Health

ISBN 978-3-031-83417-2

ISBN 978-3-031-83418-9 (eBook)

<https://doi.org/10.1007/978-3-031-83418-9>

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This work honors the rich legacy of yoga and meditation masters from the East who have generously shared their wisdom as teachers and guides. It also acknowledges those who journeyed to the West to introduce and promote these ancient practices, sparking inspiration among countless yoga instructors, researchers, and organizations. These individuals have devoted themselves to understanding, teaching, and spreading the healing power of yoga to those at risk and seeking well-being.

Acknowledgments

This book is the result of the work of many individuals to whom we offer tremendous thanks. First, we would like to express our deep gratitude and respect to the yoga and meditation masters from the East who have generously shared their wisdom as teachers and guides. Their dedication to sharing the healing power of yoga has been foundational in our work to research yoga as embodied mindfulness and to discover how to best reach and support those at risk and those seeking well-being.

We extend our sincere thanks to all the contributors who have offered their expertise in embodiment, mindfulness, yoga, body image, diversity, equity, inclusion, secularism, cultural appropriation, yoga methodology, theories of change, and the various applications of yoga. Your work has laid the foundation for the work to come. We are excited for the researchers and practitioners who will carry this work forward, using yoga as embodied mindfulness to prevent illness and promote well-being.

We would also like to acknowledge the tireless efforts of Sofie Scaletta, Carly Pershyn, and Rachel Hechinger. Special thanks go to Sofie for her exemplary leadership in guiding the group of graduate assistants through this project. Her work ethic and commitment were vital in transforming the early drafts of this book into its final professional and enlightening format.

I, Catherine Cook-Cottone, would like to thank my husband for his support during this process. Loving me when I write books is an act of courage and strength, and I see and love you. I would also like to acknowledge my emotional support team—George, the horse, Finnegan, the dog, Taffy and Hobbes, the cats, and Willow, the hedgehog for keeping me in such good company as I contemplated ideas, concepts, words, and chapters in this book. I would also like to thank my daughters Chloe and Maya Cottone for hearing me out as I process possible logic models and other writing dilemmas, a true demonstration of love. I love and appreciate you.

I, Tracy Tylka, would like to express my appreciation to my husband for his encouragement to get me out of my office to regularly move my body (via yoga and mountain biking) and engage with nature (via camping and hiking)—to actually implement what I spend so many hours studying. To Lacey and Ryley, my

labs/“babies,” I thank you for all the cuddles, pets, and kisses that help center and regulate me, while providing the nonverbal love and acceptance that fuel my work. I know you are in cahoots with your dad to improve my embodiment when you bark at me at 4pm to stop working so we can all go to the hiking trail, walk, play in the creek, and sniff the flowers. I love you.

About This Book

This four-part book examines yoga as embodied mindfulness, introducing and explicating the concepts of yoga and embodiment and the associated theoretical and empirical developments in the field. Part I introduces yoga as embodied mindfulness, providing a conceptual overview. Part I includes chapters defining yoga and embodiment, illustrating the application of a developmental therapy of embodiment to yoga, and detailing potential mechanisms of change in yoga that may contribute to the development of positive embodiment. Part I also includes a philosophical exploration of cultural appropriation of yoga and secularity as it applies to yoga, providing context for the following chapters which orient yoga as an applied practice and science. Part II provides a review of both state and trait measures useful in the practical applications of yoga for embodiment as well as embodiment-related research. Assessment domains addressed include interoception, body appreciation, the experience of embodiment, functionality appreciation, and mindful self-care. Part II also includes a chapter that reviews physiological and psychological assessments used to measure additional outcomes in yoga research.

Part III reviews research applications. This part begins with an important overview of diversity, equity, and inclusion in yoga. Next, a review of excellence in yoga research protocols provides guidance for those considering engaging in yoga research. This is followed by chapters reviewing several bodies of research in the field of yoga for positive embodiment, including yoga and body image, yoga and eating disorders, yoga and substance use, and future directions in yoga applications for depression, anxiety, and non-suicidal self-injury. Finally, Part IV provides practical and clinical considerations specific to teaching yoga classes and sessions, trauma-informed approaches to the teaching of yoga, and contextual considerations, such as developing a yoga space that supports positive embodiment.

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About the Editors

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Part I

Chapter 1

Yoga as Embodied Mindfulness: An Introduction



Catherine Cook-Cottone and Tracy L. Tylka

1.1 Introduction

Yoga can be understood as embodied mindfulness. This is a complex statement. Each term utilized to construct the statement—yoga, embodiment, mindfulness—represents unmeasurable hours of lived, human experience. First, there are tombs of philosophical, practical, and empirical works exploring yoga, its roots, its role in the development of human consciousness, and its efficacy in supporting mental and physical health (Cook-Cottone, 2015; Douglass, 2007; Foxen & Kuberry, 2021; Ranganathan, 2009; Simpson, 2021; Syman, 2010; Yogananda, 2005). The term *embodiment* is as old as it is new with etymological roots reaching back into philosophy and linguistic texts and forward into lived-experience work and attempts to understand identity and context (Cook-Cottone, 2020; Merleau-Ponty, 2012; Piran, 2016, 2017; Piran & Cormier, 2005; Piran & Neumark-Sztainer, 2022; Smith, 2017).

Lastly, mindfulness, a term that carries with it the history of contemplative practices going back thousands of years, represents decades of research in the practical field of supporting mental and physical health (Anālayo, 2019; Bunjak et al., 2022; Cook-Cottone, 2015; Lee et al., 2021). In this text, top scholars share their understanding and application of how the practice of yoga can create a bridge to and then support the maintenance of mindful, positive embodiment. More, this text provides a conceptual framework of and detailed guidance for the empirical exploration of these concepts. Finally, the text details important considerations for the delivery of

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Switzerland AG 2025

C. Cook-Cottone, T. L. Tylka (eds.), *Yoga as Embodied Mindfulness*,

Mindfulness in Behavioral Health, https://doi.org/10.1007/978-3-031-83418-9_1

yoga at studios, within the community, and within the context of a research protocol. Our purpose in writing this text has been to collect the foundational work that has been conducted to help explicate the body of knowledge that currently informs the utilization of yoga for positive embodiment and to provide a springboard for current and future scholars from which the next generation of studies can be conducted.

1.2 The Practice of Yoga for Embodied Mindfulness

Yoga, distinct from other physical exercises and activities, prepares and potentiates the body and mind to meet each other and then integrate. It is theorized that it is within these mind-body interactions that the experience we refer to as *embodiment* lies (Cook-Cottone, 2020; Piran & Neumark-Sztainer, 2022). Yoga originated and was developed in South Asia as a system for increasing both physical and mental clarity to transcend our typically limited understanding and experience of self (Douglass, 2007; Foxen & Kuberry, 2021; Simpson, 2021; Syman, 2010). The philosophy and practice can be traced back to a collection of aphorisms, or guiding principles, which illustrated the eight-limbed path in *Patañjali's Yoga Sutras* that was written between 300 and 500 CE (Cook-Cottone, 2015; Newcombe, 2009; Ranganathan, 2009; Schmid et al., 2021). As outlined in the *Yoga Sutras*, the practice of yoga can help the practitioner still the turning, or fluctuations of, the mind (Newcombe, 2009).

Some scholars note that there is a divide between the meaning of the word *yoga* and the practice of yoga. For example, Foxen and Kuberry (2021) describe yoga as a very basic, or foundational word that means to connect, join, or yoke. However, they note that earlier intentions of the word *yoga*, in reference to the practice, were quite possibly describing something else. The word *yoga* was not being used to represent the process of connection, joining, or yoking (Foxen & Kuberry, 2021). Rather, it was being used to describe the rig or contraption, or *thing* that yokes, joins, or connects the parts. In this way, yoga is the thing that helps us hold the parts together as we move through life, much like the rigging (e.g., the ropes, cables, and chains) on a sailboat that holds the sail to the vessel as it harnesses the power of the wind to make way through the water. For many practitioners, this notion is quite relatable as the yoga practice feels much like the thing that holds us together as we navigate the sometimes-stormy waters of life.

Over the centuries, scholars have sought to understand the prose and function of yoga. There are several slightly nuanced theories. Put most simply and practically, yoga is believed to offer a pathway to self-regulation through an attuned union of the internal and external aspects of self (Cook-Cottone, 2015; Foxen & Kuberry, 2021). More spiritually oriented theoretical models describe the purpose and function of yoga as the integration of the spiritual and material self to find the true nature of *Self* and experiencing liberation from suffering (Cook-Cottone, 2015; Douglass, 2007; Simpson, 2021). In some conceptualizations, this is described as

consciousness free of the material self and being unified with the universe through practice (Douglass, 2007; Newcombe 2009).

The *Yoga Sutras* provide guidance in the form of the *eight limbs* of yoga (Newcombe, 2009; Ranganathan, 2009; Schmid et al., 2021). The eight limbs of yoga are the *yamas* (daily ethical standards—non-harming, truthfulness, non-stealing, regulating energy, and non-greediness) and *niyamas* (daily observances—cleanliness, contentment, work ethic, self-study, and surrender), followed by *āsanas* (the yoga postures and practices), *pranayama* (breathwork), *pratyahara* (turning inward), *dharana* (concentration), *dhyana* (meditation), and *samadhi* (advanced meditation and experience of connection) (Cook-Cottone, 2015; Schmid et al., 2021). Most yoga research protocols include postures, breathwork, and meditation (Cook-Cottone, 2015). Less commonly, researchers explore the efficacy of application of all eight limbs of yoga (Schmid et al., 2021).

It can be helpful to consider what is unique about mind-body practices and specifically what is unique about yoga that contributes to well-being and the experience of positive embodiment. Although there are many theories and logic models associated with the mechanisms of change, most share *mindful awareness* of the physiological self, including sensations, breath, and movement as well as the emotional and cognitive aspects of self (Cook-Cottone, 2015, 2020). When a person practices mindful awareness of what they are experiencing internally through *interoception* (awareness of internal sensations, a moment-by-moment mapping of the body's internal landscape) as well as via *exteroception* (awareness of external sensations, or a moment-by-moment mapping of the proximal external environment through the senses), the mindful awareness itself is an essential part of the rigging, or yoga, that contributes to the integration, or holding, of the self together (Cook-Cottone, 2023). When turning toward the internal experience of self, it is *mindfulness* of the body, its needs and desires, that allows for attuned responsiveness within the context of a person's relationship with oneself (Cook-Cottone, 2015). It is theorized that over time, the state, or temporary experience of mindful awareness of and attunement with the body, becomes internalized and automatized into what is referred to as the trait of positive embodiment (Cox & Tylka, 2020; Perey & Cook-Cottone, 2020; Piran & Cormier, 2005).

Bodies have been historically conceptualized as objects valuable for their external functions or their utility in service to others or society, and, especially for women, their appearance and attractiveness (Cook-Cottone, 2020; Piran & Cormier, 2005). As the body is experienced from the inside as a felt sense, as an aspect of self, and, as some philosophers see it, as the self (Merleau-Ponty, 2012; Smith, 2017), it is theorized that the influence of societal pressures on the body, including media appearance ideals, oppressive gender roles and stereotypes, racism, misogyny, homophobia, and transphobia, may be mitigated (Cook-Cottone, 2020; Piran & Cormier, 2005; Tylka & Piran, 2019). The mindful orientation toward the internal experience of self, partnered with the mindful awareness of external sensations and experiences that occurs in yoga practice, appear to provide a unique protection from external pressures, as yoga fortifies and nourishes factors that promote resilience and well-being from the inside out (Cox & Tylka, 2020; Perey & Cook-Cottone,

2020; Piran & Neumark-Sztainer, 2022). These are the theoretical bones of the conceptual framework for yoga as embodied mindfulness.

1.3 Positive Embodiment and the Growing Field of Embodiment Research

Positive embodiment is the process of living in and through the body as a primary center of awareness and experience, with connection and attunement in the internal experiences of self (physiology, emotions, and thoughts) as well as the experiential experience of self (family, community, and culture; Cook-Cottone, 2015, 2020, 2023). Importantly, positive embodiment consists of the mindful practice of unifying and integrating the attention given to the body's needs and contextual demands as one negotiates life experiences (Perey & Cook-Cottone, 2020).

While the conceptualization of embodiment can be traced back to the mid-twentieth century through the work of the existential phenomenologist Merleau-Ponty and the existential feminist Simone de Beauvoir (see Cook-Cottone & Perey, Chap. 2), embodiment *research* as it relates to well-being gained momentum with the work of Piran in her Developmental Theory of Embodiment (DTE; Piran & Teall, 2012; Piran, 2016, 2017; Piran & Neumark-Sztainer, 2022, see also Chaps. 2 and 3). Based on a large-scale, decades-long qualitative research program that gathered girls' and women's experiences via life history and prospective interviews and focus groups, the DTE was developed and refined. The core DTE construct is the *Experience of Embodiment*, which reflects participants' experiences in their bodies as they engage in the world around them. The Experience of Embodiment ranges from positive to negative along the following five dimensions: (a) body connection and comfort (vs. disrupted body connection and discomfort), (b) agency and functionality (vs. restricted agency and restraint), (c) experience and expression of desire (vs. disrupted connection to desire), (d) attuned self-care (vs. disrupted attunement, self-harm, and neglect), and (e) inhabiting the body as a subjective (vs. an objectified) site. Piran et al. (2020) developed the Experience of Embodiment Scale (EES) to assess these dimensions of positive embodiment, which garnered substantial psychometric support. The DTE further identifies social experiences that can serve as protective (and risk) factors to shape people's experience of embodiment. Protective factors build and maintain positive embodiment, and Piran (2016) identified three domains: experiences that promote physical freedom, experiences that promote mental freedom, and experiences that promote social power and relational connection. Three years after the development of the EES, Piran et al. (2023) offered psychometrically supported scales to assess these protective factors. These measures, along with validated measures of body appreciation, functionality appreciation, interoceptive awareness, and mindful self-care (all of which reflect positively embodied attitudes, sensations, and behaviors) set the stage for deepening the conceptualization and study of the connection between yoga and positive embodiment.

This conceptualization and research are shared within the chapters of this book. More specifically, this book considers how yoga may serve as an embodying experience that cultivates physical and mental freedom and social connectedness via enhancing body connection, agency, functionality, authentic expression, attuned self-care, and a mindful, subjective awareness of the body. It presents past and current research including yoga-based interventions and single-session designs that have been shown to cultivate aspects of positive embodiment alongside ideas for how to carry this research forward. Overall, this book provides a foundation of knowledge of the concepts and potential mechanisms of change involved in the link between yoga and positive embodiment, illustrative examples of applied research, and ideas and tools for how to navigate the research forward. Readers will be able to conduct high-quality research that further explores the complex connections between yoga and embodying experiences.

1.4 Organization and Offerings of the Text

This four-part book examines yoga as embodied mindfulness, introducing and explicating the concepts of yoga and embodiment and the associated theoretical and empirical developments in the field. Part I introduces yoga as embodied mindfulness, providing a conceptual overview. Part I includes chapters defining yoga and embodiment, illustrating the application of a developmental therapy of embodiment to yoga, and detailing potential mechanisms of change in yoga that may contribute to the development of positive embodiment. Part I also includes a philosophical exploration of cultural appropriation of yoga and secularity as it applies to yoga, providing context for the following chapters which orient yoga as an applied practice and science. Part II provides a review of both state and trait measures useful in the practical applications of yoga for embodiment as well as embodiment-related research. Assessment domains addressed include interoception, body appreciation, the experience of embodiment, functionality appreciation, and mindful self-care. Part II also includes a chapter that reviews physiological and psychological assessments used to measure additional outcomes in yoga research.

Part III reviews research applications. This part begins with an important overview of diversity, equity, and inclusion in yoga. Next, a review of excellence in yoga research protocols provides guidance for those considering engaging in yoga research. This is followed by chapters reviewing several bodies of research in the field of yoga for positive embodiment, including yoga and body image, yoga and eating disorders, yoga and substance use, and future directions in yoga applications for depression, anxiety, and non-suicidal self-injury. Finally, Part IV provides practical and clinical considerations specific to teaching yoga classes and sessions, trauma-informed approaches to the teaching of yoga, and contextual considerations, such as developing a yoga space that supports positive embodiment.

1.5 A Bridge to and Call for More Research

In recent decades, there has been great progress in the body of research exploring yoga as a pathway to positive embodiment. In 2020, in a call for advancements in yoga research for positive embodiment, Cook-Cottone, Cox, Neumark-Sztainer, and Tylka highlighted the need for a stronger, agreed-upon definition and operationalization of the terms *yoga* and *embodiment*, better understanding and utilization of the constructs relevant to assessing logic models and mechanisms of change, and increased rigor and excellence in research protocols utilized. This book answers this call and serves as a bridge to the next phase of research on yoga for positive embodiment. To engage in this next phase, more funding is clearly needed.

More research is warranted, as yoga and contemplative practices have become increasingly popular over the past two decades. To illustrate, a recent study assessed the prevalence and 20-year trends in the use of yoga, meditation, guided imagery, and progressive relaxation in US adults between 2002 and 2022. In a population-weighted analysis of 134,959 participants across 5 cycles of the National Health Interview Survey, Davies et al. (2024) examined practice use and associations with sociodemographic and health factors. The overall use of meditation, yoga, and guided imagery and progressive relaxation increased significantly from 2002 to 2022, with consistent growth across most socio-demographic and health strata. Specifically, the overall use of meditation increased from 7.8% in 2002 to 18.3% in 2022, or 60.53 million people. Utilization of yoga increased from 5.0% in 2002 to 16.8% in 2022, or 55.78 million people. Use of guided imagery and progressive relaxation increased from 3.9% in 2002 to 6.7% in 2022, or 22.22 million people.

Accordingly, the business of yoga has experienced significant growth as well, particularly in the clothing and yoga mat industries. Driven by increasing levels of health awareness and the willingness of people to engage in health practices as well as the uptick in yoga access for a wider range of demographics, there are rising profits in both of these industries (Expert Market Research, 2024, Fortune Business Insights, 2023; IMARC Group, 2024a, b). Fortune Business Insights (2023) projects the global yoga clothing market to expand at a compounded annual growth rate around 8.17% from 2024 to 2032.

However, despite the increase in popularity of these practices and the boom in yoga clothing and mat profits, there is no clear link between the substantial revenue generated and provision of yoga research funding. The research dollars spent currently appear to be in the research and development sector of the industry. This research is not focused on the safe and effective delivery of yoga, nor on understanding mechanisms of change, contextual factors, or yoga outcomes. Currently, the yoga research funded by yoga clothing and mat business is product-based, not yoga-based. Understandably, the focus is on creating competitive products rather than doing research seeking to understand yoga and its impact on mental and psychological well-being. Yet, studies identifying what effective yoga delivery entails, its mechanisms of change, and positive outcomes of yoga practice are exactly what we need, as information gleaned from these studies could be used to get people

excited about incorporating yoga into their daily lives, which will then drive their health, well-being, *and* yoga product consumption. Therefore, it makes good sense, for both health and marketing purposes, to devote more funding on the delivery, mechanisms of change, and outcomes of yoga. Arguably, the long-term adoption of yoga will be bolstered by the scientific study documenting its preventative and therapeutic benefits.

As demonstrated throughout this text in chapter after chapter, yoga presents as an accessible, practical, and holistic approach to the enhancement of well-being and positive embodiment and an avenue to decrease risk for disorders of self-regulation such as eating disorders and substance use. Models of embodiment help us understand mechanisms of change. While there is still more to understand, we have emerging knowledge on how to practice, share, and research yoga in a manner that honors its heritage and roots while adequately operationalizing and manulazing the practice for research purposes. Further, as well-explicated within this text, attention to diversity, equity, and inclusion, as well as the contextual factors such as the yoga community, space, and style of teaching, are critical to creating access, offering welcoming spaces, and providing the support that is needed for positive embodiment. We offer this book as a foundational step toward more solid footing on the empirical journey to truly understand yoga's power to enhance and support ongoing well-being through positive embodiment.

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Chapter 2

Defining Embodiment, Yoga, and Yoga as Embodied Mindfulness



Catherine Cook-Cottone and Iris Perey

The body is our general medium for having a world.

Maurice Merleau-Ponty (2002, p. 169)

2.1 Introduction

Considering yoga as embodied mindfulness requires a thorough understanding of each of the underlying concepts as well as how we operationalize yoga as embodied mindfulness for this text. Although yoga has a long history with deep philosophical and practical roots, embodiment is a relatively newer term perhaps best understood as a philosophical way of being, with recent literature attending to define exactly what it means to be embodied. Given the popular embrace of both yoga and embodiment, there is also some confusion about what exactly is meant by both terms, with yoga and embodiment practice currently presenting as wide and very diverse (e.g., Instagram yoga pages, goat yoga, and ecstatic dance). It begs the question, at what point are the practices representing what is meant by the words yoga and embodiment and when might they be performative, entertaining, dissociative (rather than embodied), or perfectionistic idealizations that result in movement away from positive embodiment and wellbeing and toward maintenance of or risk for physical and mental illness.

It is a complex line of inquiry. For example, it is the deeply embodied dance that is perhaps the most entertaining to watch and for the dancer, how beautiful it must be to be completely in and of the dance and be seen. Or consider the yoga

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Switzerland AG 2025

C. Cook-Cottone, T. L. Tylka (eds.), *Yoga as Embodied Mindfulness*,

Mindfulness in Behavioral Health, https://doi.org/10.1007/978-3-031-83418-9_2

practitioner, working their way into dancer pose, a distraction, a memory of the dancer pose years before, the day after a loss. Then, the grounded foot lifts out of its inner edges as the student begins to waiver. At that moment, the teacher suggests pressing into the center line of the foot and offers a reminder to orient toward breath. The redirection brings the student back to the here and now, back to their center line, and back into dancer. So, this is not a question of this or that or it is here or it is not. More, it is coming to an understanding of what it means to practice yoga, mindfully and embodied, and what that process might be as a concept in a way that truly represents what it is as an experience. In this chapter, each of the concepts—embodiment, yoga, and finally, yoga as embodied mindfulness—will be defined as constructs that are associated with positive embodiment and the pathway to wellbeing.

2.2 Philosophical Roots of Embodiment

Beyond the consideration of being as manifesting from the body, embodiment entails a continuously evolving experience of self (Cook-Cottone, 2020). Specifically, “Embodiment reflects a developing, evolving experience of the self. It is unfolding within the context of the attunement with internal needs. Embodiment thrives with the context of a personal sense of purpose and meaning, and the self-determined and attuned experiences of the self as one interacts with the world.” (Cook-Cottone, 2020, p. 11). From a very practical point of view, embodiment is the difference between feeling as though you have a body and being centered within the body and acting with attunement and agency within the world. From a philosophical perspective, embodiment represents the perceptual experience of the body engaging with the world (Merleau-Ponty, 1962).

Gefei (2023) asserts that the discussion on embodiment dates to Plato who claimed the body as the tomb of the soul. Embodiment is a term that can now be juxtaposed against European rationalism which places human rationality as higher than and independent of human sensory cognition and emphasizes mind and body dualism (Gefei, 2023). There have been many influences supporting and propagating objectivism, logical positivism, cognitive processing models with cognition viewed as a somewhen disembodied process with the brain making calculations, theorizing, and believing in ways that had little to do with the perceptions and experienced of the body (Gefei, 2023). However, a careful review of philosophical influences within the past 100 years suggests a growing interest in and adoption of embodied perspectives on the human experience.

2.2.1 *The Philosophy of Embodiment as a Human Right*

Philosophically, human rights are distinct from legal rights with human rights referring to the embodied life of a human being and legal rights referring to the abstract definition of the legal person (Vatter & De Leeuw, 2023). In an historical attempt to honor the embodied life of a human being with a legal guidance, each of the human rights listed in the Universal Declaration of Human Rights (UDHR; e.g., right to live, think, speak, work, rest, learn) begin with the un-declared assumption that we are born embodied and have the right to live an embodied life (see <http://www.un.org/en/universal-declaration-human-rights/> for a listing of human rights). Philosophically, *embodiment is the most basic human right* from which all other human rights extend- living, thinking, speaking, working, resting, and learning from a fully embodied experience of self (Cook-Cottone, 2020). There are many obstacles to embodiment including trauma, war, poverty, food scarcity, gender-based violence, racism and hate, chronic stress, biological and physiological tendencies, generational patterns that ignore and suppress emotions, lack of awareness and/or interoceptive skills, limited tools to negotiate challenging emotions, as well as community and cultural behavioral patterns (Cook-Cottone, 2020). It is often these pressures, violations, and circumstances that push individuals to the disembodied experiences of dissociation, depersonalization, reaction, addiction, and disorder. It is in these extremes that our loss of embodiment, and perhaps our humanity, can become very clear (Cook-Cottone, 2020).

This most basic human right, embodiment, is often threatened by both external and internal forces and perhaps it is threatened in ways that are most profound when the external and internal forces merge (Cook-Cottone, 2020). Consider that it is in times of societal and personal unrest that ideology and lived-experience collide, and that this collision can both end and begin new ways of thinking (Cook-Cottone, 2020). Depending on the lens, some refer to this collision as psychology, some call it philosophy, and some cite geopolitical history. Embodiment lies here, in the nexus of the lived-experience, philosophical, sociopolitical, and psychological (Cook-Cottone, 2015a; Foucault, 1978; Launeanu & Kwee, 2018; Piran, 2019a, b). In current times, products of the mind (e.g., ideologies) are held in high regard while experiences of the body are ignored, discounted, and disparaged. During times of war, it becomes very clear that ideologies can inspire humans as well as place us at tremendous risk. Consider that positive embodiment is, in a sense, a close synonym for what is meant by humanity. Most certainly, positive embodiment is a pathway to our humanity, the quality or state of being a kind, compassionate, and benevolent human being, and can be a powerful antidote to malignant ideologies.

2.2.2 *World War II and Viktor Frankl*

To illustrate how embodiment is threatened in global dynamics, think back to the tragic and horrific events of World War II. This war, which was hoped to end all wars, made us question who we are as humans and begged the larger question, “What is humanity?” At the macrocosm level, the war was the material collision of destructive hate-filled ideologies and the lived experience of war (e.g., antisemitism, scientific racism [social Darwinism], nationalism, and a belief in war as an honorable solution). This war is believed to be the deadliest military conflict in history. Ending in 1945, this war was also the birthplace of the proclamation of the Universal Declaration of Human Rights (i.e., 1948). More, it was at this same time that the philosophical schools of phenomenology and existentialism, the roots of embodiment thinking, were being applied, in part, to understand the horrors and drives of World War II.

One of the most inspiring philosophical developments related to embodiment was during this time. In 1946, Viktor Frankl, neurologist, psychiatrist, and existentialist, detailed his experiences in the Auschwitz concentration camp during World War II in his book *Man’s Search for Meaning* (2006). Within the context of extraordinary cruelty and horror, Frankl (2006) gained clarity on the definition and function of love and how a sense of meaning and purpose was key to resilience. Frankl (2006) introduced the concept of *dimensional ontology*. Dimensional ontology emphasizes a oneness of being, an anthropological unity and wholeness composed of the somatic (i.e., body), psychic (i.e., mental), and noetic (i.e., spiritual) aspects of self (Cook-Cottone, 2020; Stankovskaya, 2014). Frankl (2006) distinguished between thinking and acting as an ethic whereas the embodiment of values is much more critical than fancying the mere idea of them. He phrased it this way, positing that life questions each of us and our answers must not come in talk or meditation, but in right action (Frankl, 2006). In this way, the acts of the heart and mind (e.g., our passions, beliefs, and values) are articulated through the body and not simply, and perhaps ineffectually, through ideas or words (Cook-Cottone, 2020).

2.2.3 *Other Philosophical Influences of the Twentieth Century*

In the mid twentieth century, existential philosophers began to question the traditional Platonic notion that the body was inferior to the mind (Cook-Cottone, 2020; Smith, 2017). For example, in 1945 Maurice Merleau-Ponty powerfully criticized philosophical tradition in his text *Phenomenology of Perception*. Merleau-Ponty confronted the philosophical *problem of the body* and brought to the forefront the underestimated and discounted dimension of experience: the lived body (Cook-Cottone, 2020; Halák, 2023; Merleau-Ponty, 2002). According to Halák (2023), Merleau-Ponty asserts that human’s higher-order cognitive acts (thinking) are fundamentally linked to embodiment and motor intentionality. That is, from a

Merleau-Pontian perspective, individuals experience their environments in ways that are conditioned and informed by more than their cognitive sense-making of what occurs, but by their embodied senses, habits, memories, and actions urges (motor intentions; Cook-Cottone, 2020; Jackson, 2023). What humans think and understand is inextricably tied to the world as it is experienced by our bodies (Cook-Cottone, 2020; Jackson, 2023).

For Merleau-Ponty, the body occurs as a problem when, “I consider my body, which is my point of view upon the world, as one of the objects of that world” (Merleau-Ponty, 2002, p. 73). Here, he points to the error of identifying the self, yourself, as only the thinking part of you and that the transcendent thinking part of you perceives your body as an object, a thing, and something that is not self (Cook-Cottone, 2020). This conceptualization has two parts. First, the thinking aspect of self is separate or distinct from the body. Second, it is superior to the body. This way of seeing the self has deep historical roots. Smith (2017) explains that, historically, many philosophers and theologians have held that embodiment is the consequence of a fall from an originally superior state of pure mental or ethereal existence. In this way, embodiment is to be avoided and/or controlled (Cook-Cottone, 2020). Smith (2017) points to how many philosophers and theologians speak of embodiment in terms of the sense of self (subjective entity) being coextensive with, captaining (taking charge of), or even being imprisoned in the body. In this line of conceptualizing the experience of self with a body, humans long to be free of the body, its burdens, limitations, and mortality (Cook-Cottone, 2020).

Rather, existential phenomenologists such as Merleau-Ponty understand the body as subject and agent with no separation between bodily and intelligent conduct (Cook-Cottone, 2020; Moya, 2015). To be embodied transcends the physiological and psychological as thinking orientations and rests in the essence of being (Cook-Cottone, 2020; Jackson, 2023). This can be considered a materialist *point of view* holding that we are our bodies with awareness and consciousness arising from the whole being inclusive of your body and your thoughts (Cook-Cottone, 2020). Aligned with Merleau-Ponty, our thoughts are part of our embodied experience (Cook-Cottone, 2020). A philosopher and author/editor of *Embodiment: A history*, Justin Smith (2017), defines embodiment this way: “Embodiment—having, being in, or being associated with a body—is a feature of the existence of many entities, perhaps even of all entities” (p. 1). The self (subject/entity), who we think we are, may in fact be identical to, or an emergent product of, our body (Cook-Cottone, 2020; Smith, 2017). As Smith (2017) asserts, humans are embodied, integrated, and whole beings that live, sense, perceive, feel, and think. The shift here is that thinking comes *from* the body rather than an action we take to consider, understand, or control the body (Cook-Cottone, 2020).

2.2.4 *Sensorimotor Implications of Embodiment*

Developmental theorists, such as Jean Piaget, asserted that the origins of thinking and intelligence are embodied (Cook-Cottone, 2020; Gefei, 2023; Piaget, 1952). Considering the developmental perspective, it has been long understood that the words and ideas that we know and speak are sourced from our lived experience (Cook-Cottone, 2020). In 1936, Piaget described the cognitive development of children as occurring in a series of stages of maturation (e.g., sensory-motor, pre-operational, concrete operational, and formal operational). Each state is marked by an increased ability to symbolically represent the world and then make associations between and among those symbolic representations (Gefei, 2023; Piaget, 1936). Central to Piaget's theory is the notion that cognitions manifest from the internalization of physical activity (the perception and experience of bodily movements; Gefei, 2023; Piaget, 1936).

As described in Cook-Cottone (2020), when a 2-year-old says the word "ball," they do so, not spontaneously, but from hour after hour of bouncing, rolling, playing, and gaining experience with the ball. This sensorimotor, lived experience is paired with a caretakers' verbal expression of the acoustic phonemes of the letters /b/ /a/ /l/ /l/ entering the toddler's ears as they see the round, bouncy sphere move through space and from their hands to those of their parents. The ball bounces and moves as the parents say, "Get the ball. Throw the ball. I have the ball." Neurologically, perhaps on the hundredth or the thousandth repetition, the connections from the toddler's sensory system, motor systems, articulatory systems, and social and linguistic systems integrate—and the toddler says, "ball." As manifest from lived, embodied experiences, they know that this is a ball. It is from the sensorimotor actions of feeling, smelling, and then engaging in action and interaction with the ball that the word ball arises. According to Gefei (2023), such theoretical views, which are opposed to the dualistic view of mind and body, can be called monism of mind and body—a theory that holds that psychological activity and psychological structure and function of the brain are inherently coherent, which is ultimately a manifestation of cause and effect in material unity.

2.2.5 *Phenomenology and Embodiment*

Max van Manen (2014) and McBride (1983) assert that it is through our bodies that we can know ourselves, others, and the world. McBride (1983) illustrates this process through the example of how a person *knows* how to safely pour hot water from a kettle as they talk to a friend. According to McBride (1983), this form of *knowing* is a non-cognitive, embodied experience. Like pressing a foot on the gas pedal to stop a car at a stop sign, these acts involve physics, mechanical engineering, and an understanding of energy and matter far beyond what most people can articulate—and yet *we know* (Cook-Cottone, 2020). In this way, to be positively embodied,

therefore, is something that may not be in the forefront of our minds (Cook-Cottone, 2018). It is not something we necessarily think about, we live it.

It is believed that Heidegger referenced embodiment when he referred to “being-in-the-world-normally” (Overgaard, 2004; Svenaeus, 2013, p. 83). This was not to be understood as being contained *in* something; rather *in* refers to residing in or inhabiting (Overgaard, 2004). Being-in-the-world-normally, as a positively embodied being, can be understood by considering the lived and felt-experience of a young child well held in a safe and nourishing environment (Cook-Cottone, 2018, 2020). Within this context the child spontaneously plays, eats, and interacts with others with and from the body (Cook-Cottone, 2018, 2020). When a human being is positively embodied in this way the expressions of the self through laughter, crying, hugging, and moving are all extemporaneous (Cook-Cottone, 2018, 2020). Phenomenologically, there is no thinking about the body, judging how it might look or perform (Cook-Cottone, 2020). The body is as the being is: here, or as Heidegger would describe as being-present-at-hand-together, body-soul-spirit (Cook-Cottone, 2020; Overgaard, 2004).

2.3 From Philosophy to Psychology: Piran’s Developmental Theory of Embodiment

Niva Piran began her research on embodiment over 20 years ago, taking inspiration from Simone de Beauvoir’s feminist existentialist writings about the loss of embodiment during adolescence for girls (Piran, 2016). As one of leaders of the existentialist movement after WWI, de Beauvoir emerged and is now revered for her groundbreaking text *The Second Sex* (de Beauvoir, 1949). In this text, de Beauvoir (1949) details the formative years of female development describing their loss of embodiment in adolescence. de Beauvoir (1949) viewed embodiment as an organic expression of individuality as well as a preconscious vehicle through which a person explores her world. de Beauvoir (1949) asserts that developmentally, perhaps due to social constructs and pressures, for the female adolescent there is a shift away from implicit ownership of their body (de Beauvoir, 1949; Piran, 2016). de Beauvoir (1949, p. 379) described it this way, “Oppressed and submerged, she becomes a stranger to herself because she is a stranger to the rest of the world.” The adolescent female begins to see herself as the world sees her. According to de Beauvoir (1949), a conflict breaks out between the adolescent’s experience as a lived subject (her authentic experience of self in the world) and the social pressure to present herself as a passive object (de Beauvoir, 1949). The dilemma as described by de Beauvoir (1949), “If I can accomplish myself only as *Other*, how will I renounce my *Self*?” (p. 397). Ultimately, according to de Beauvoir (1949), within the female adolescent, her embodiment shifts from an expression of who she is, to a shared expression of the girl and her culture.