AN EXPLORATION OF ADVERSE EXPERIENCES IN MINDFULNESS MEDITATION

by

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Abstract

The current body of research investigating the effectiveness of mindfulness meditation has largely supported its use in a wide range of therapeutic contexts. Although the benefits of mindfulness continue to be affirmed by empirical evidence, an emerging area of research has begun to document its potential for eliciting adverse psychological and physical effects. However, the psychological, social, cultural, and historical variables that give rise to these experiences and the individual’s ability to successfully integrate them remain unclear. The present study addresses this increasingly relevant gap in the literature by conducting exploratory in-depth interviews with eight participants who experienced adverse events brought on by their engagement in mindfulness meditation. The interviews explored, 1) participants’ experience of adverse events, 2) the contextual factors surrounding these experiences, and 3) how they coped with these experiences. The data was analyzed using a grounded theory approach to explore the common themes that emerged from participants’ experiences. The findings provide a better understanding of experiences of distress precipitated by mindfulness meditative practices and how counsellors can support practitioners in coping with adverse events.

Keywords: Mindfulness, meditation, adverse effects, negative experiences
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# Table of Contents

Abstract ............................................................................................................................................... ii
Acknowledgements ................................................................................................................................. iii
Table of Contents ...................................................................................................................................... iv

## Chapter One: Introduction .................................................................................................................. 1
  - Rationale ........................................................................................................................................... 4
  - Research Question ............................................................................................................................... 5
  - Clinical Implications ............................................................................................................................ 5
  - Conclusion ......................................................................................................................................... 6

## Chapter Two: Literature Review ........................................................................................................ 7
  Historical Roots of Mindfulness in Buddhism ...................................................................................... 7
  - Mindfulness Terminology .................................................................................................................. 8
  - Theory of Mindfulness Practice ........................................................................................................ 8
  - Mindfulness Practice in the Buddhist Context ................................................................................ 10
  Complexities and Tensions: Integrating Mindfulness into a Western, Psychological Framework .................................................................................................................................................. 11
  - Theoretical Differences: Perspectives on the Self and Wellness ................................................... 13
  - Practical Differences: Mindfulness Practice in the West ................................................................. 16
  Adverse Experiences ............................................................................................................................ 18
  - Buddhist Perspectives on Mindfulness’ Adverse Effects ................................................................ 19
  - Psychotherapy Literature on Mindfulness’ Adverse Effects ............................................................. 22
  - Adverse effects of meditation .......................................................................................................... 23
  - Adverse effects of mindfulness: Indirect explorations..................................................................... 26
  - Adverse effects of mindfulness: Direct explorations ....................................................................... 32
  - Adverse effects of mindfulness: Clinical perspectives .................................................................... 33
  Summary of the Literature Review ..................................................................................................... 35

## Chapter Three: Methodology ............................................................................................................. 36
  Qualitative Research Design: Rationale ............................................................................................. 36
  Study Design ........................................................................................................................................ 40
  Grounded Theory .................................................................................................................................. 40
  Participants: Inclusion Criteria and Recruitment ............................................................................... 41
  Procedures .......................................................................................................................................... 43
  - Sampling method ............................................................................................................................. 43
  - Demographics Survey ...................................................................................................................... 43
  - Semi-structured Interview ............................................................................................................... 43
  - Data Collection ............................................................................................................................... 44
  - Data Analysis ................................................................................................................................... 46
  - Locating the Researcher .................................................................................................................... 47

## Chapter Four: Results .......................................................................................................................... 49
  Individual and Sociocultural Context ................................................................................................. 49
  - Personal History and Personality Factors ....................................................................................... 50
  - Motivation and Expectations ............................................................................................................ 53
  - Transitional Period ............................................................................................................................. 56
  - Cultural Tensions ............................................................................................................................... 58
  Adverse Effects .................................................................................................................................... 63
List of Figures

Figure 1: Model of adverse experiences in mindfulness meditation ........................................ 132
# List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Study Recruitment Announcement</td>
<td>148</td>
</tr>
<tr>
<td>B</td>
<td>Information Letter</td>
<td>149</td>
</tr>
<tr>
<td>C</td>
<td>Consent Form</td>
<td>152</td>
</tr>
<tr>
<td>D</td>
<td>Demographics Form</td>
<td>153</td>
</tr>
<tr>
<td>E</td>
<td>Semi-Structured Interview Guide</td>
<td>154</td>
</tr>
<tr>
<td>F</td>
<td>Counselling Resources</td>
<td>156</td>
</tr>
</tbody>
</table>
Chapter One: Introduction

Meditation has been used for centuries as a contemplative method in the monastic orders of many global religions (Grossman, 2011). Rooted in Buddhist religious traditions, mindfulness meditative practices have proliferated throughout the lay world in recent times (Deurr, 2004). Mindfulness is now one of the “most widely practiced, enduring, and researched psychological disciplines” (Walsh & Shapiro, 2006, p. 1).

The popularity and diversity of applications of mindfulness in the Western world would appear to necessitate a thorough investigation of the practice. Although over 2200 empirical studies on mindfulness meditation were published between 1984 and 2013, most of these focused primarily on the positive impacts of mindfulness (Fulton, 2014). Thus, a critical investigation of the adverse effects that may be elicited by mindfulness practice is warranted.

The lack of a balanced perspective in the research literature is due to inconsistencies in the terminology, practice, and purpose of mindfulness. These inconsistencies developed out of the contexts from which mindfulness evolved in the West. This is partly due to the fact that even in its original Buddhist religious context, mindfulness is a complex concept with varying histories and purposes (Dunne, 2011; Goldstein, 2002; Salmon et al., 1998; Singh, Lancioni, Wahler, Winton, & Singh, 2008). In Buddhism, mindfulness has at times been referred to as a state of mind and as a practice (Grossman, 2011; Namto, 2011). In the West, it has been conceived of as a personality trait as well as a state and practice (Grossman, 2011). These differing understandings have made it difficult to apply mindfulness in secular contexts in a systematic manner (Kostanski & Hassed, 2008). In order to appreciate the origin of these varying understandings, it is important to outline the historical evolution of mindful-
ness in the West, particularly the Buddhist tradition that has been at the forefront of the popularization of mindfulness in the West (Gilpin, 2008).

The Theravadin Buddhist tradition traces its lineage to the earliest schools in Buddhism. These schools were founded on the teachings of the Pali Canon, a collection of the earliest known texts derived from the word of the Buddha (Gethin, 1998). In these texts, mindfulness meditation is synonymously referred to as vipassana, or insight meditation (Namto, 2011; Thera, 1998). Insight, in this context, refers specifically to the development of awareness of the true nature of phenomena, which is a foundation of the Buddhist worldview. Buddhism is based on the notion that impermanence, emptiness of self, and suffering pervade all experience (Thera, 2006). A lack of awareness about how these aspects of phenomena manifest in one’s experience is said to cause the experience of suffering. Mindfulness is part of a comprehensive path outlined by the Buddha to ameliorate this condition (Salmon et al., 1998). While vipassana has been at the forefront of the mindfulness movement in the West, the original Buddhist understanding of ‘suffering’ and ‘insight’ have not been carried into Western mindfulness practices (Djikic, 2014).

Mindfulness was introduced to North America in the early 1970s by Western teachers who had undertaken meditative training in the East (Gilpin, 2008). After spending considerable time in Thailand and Burma (Myanmar), where the Theravadin tradition predominates and vipassana is widely practiced, meditation teachers Jack Kornfield, Joseph Goldstein, and Sharon Salzberg went on to establish the Insight Meditation Society or Vipassana sangha (IMS; www.dharma.org) in the United States in 1975. Their popularity in the West influenced several early progenitors of mindfulness’ integration into psychotherapy: Jon Kabat-Zinn, Zindel Segal, Mark Williams, John Teasdale, and Mark Epstein (Gilpin, 2008).
Soon after its introduction by the IMS, the practice was recontextualized by the psycho-medical community as a complement to popular therapeutic methods (Walsh & Shapiro, 2006). The secularization of mindfulness began with Jon Kabat-Zinn’s Mindfulness-Based Stress Reduction (MBSR) program, which was developed in 1979 for patients suffering from chronic pain at the University of Massachusetts Medical School (Kabat-Zinn, 1982). Kabat-Zinn’s (1994) definition of mindfulness as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (p. 4) reflects a popular understanding of mindfulness within psychology and lay settings. In this secular context, mindfulness practice is now associated with notions of relaxation and well-being (Salmon et al., 1998). Mindfulness has been employed by Western psychology as a method of training attention, building awareness, and improving self-regulation (Salmon et al., 1998; Walsh & Shapiro, 2006). The variety of applications that originated from this tradition indicates the importance of appreciating context when examining experiences in mindfulness meditation. Psychotherapy has been instrumental in the process of secularization and decontextualization that mindfulness has undergone.

Since its introduction to the secular sphere in the late 1970s, mindfulness in the form of MBSR has also been successfully applied to a number of different psychological and medical issues, like anxiety disorders (Kabat-Zinn, 1992), cancer (Speca et al., 2000), eating disorders (Kristeller & Hallett, 1999), and fibromyalgia (Goldenberg et al., 1994). In addition, it has been successfully integrated into existing psychotherapies. Of these, the most widely used are Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), Acceptance and Commitment-Based Therapy (ACT; Hayes, Strosahl, & Wilson, 1999), and Dialectical Behavioural Therapy (DBT; Linehan, 1993). Outside of psychothera-
MBSR has also been adapted to a variety of environments with promising results. For example, MBSR is now offered in schools, prisons, hospitals, and businesses (Deurr, 2004). While the benefits of mindfulness practices have been recognized by the psychotherapy community, an integration of these practices that honours the original understandings, practices, and goals of mindfulness has been elusive.

Though mindfulness-based practices and interventions show wide-ranging positive effects, there is a lack of empirical research on adverse experiences and possible side effects. Given the widespread implementation of mindfulness practices in a variety of settings, it is important to address this growing gap in the research.

**Rationale**

While research on the benefits of mindfulness meditation and mindfulness-based interventions dominate the field of psychotherapy, there is a dearth of studies addressing the potential harm that can affect individuals who engage in the practice. Although limited, there are findings in previous research suggesting that mindfulness practitioners do experience adverse effects that can cause them distress (e.g., Crane & Williams, 2010; Lynch, 2004; Shapiro, 1992a, 1992b). These studies, as well as two meta-reviews (Lustyk, Chawla, Nolan, & Marlatt, 2009; Perez-de-Albeniz & Holmes, 2000), have shown that meditative practices can elicit adverse effects ranging from pain to psychosis. Most of these studies have explored adverse effects within the context of intensive retreat settings, but fail to capture the nuances and contexts of individual experiences in other settings. Many of these studies have also focused on clinical populations and those with previous psychiatric disturbances. Thus, there is a lack of understanding why normal individuals might experience adverse effects in lay settings. This study addresses this gap by focusing on individual experiences of adverse effects from mindfulness meditation in lay settings.
Research Question

The present study is guided by one main research question: What are the adverse effects that individuals experience while practicing mindfulness meditation? This research question includes an exploration of the contexts underlying the practice as well the experience of coping with the adverse effects. This research question was addressed using semi-structured interviews with individuals who had experienced adverse effects from their mindfulness practice. Their experiences were analyzed using a grounded theory approach in order to identify themes and construct a theory that accounted for their experiences (Glaser & Strauss, 1967).

Clinical Implications

The results of this study have implications for clinicians working with individuals who have undertaken mindfulness meditative practices. The findings are also important for the administration of mindfulness, preparation of practitioners, and providing support during mindfulness-based programs. By understanding the adverse experiences of practitioners, whether related to individual or sociocultural factors, counsellors can be better prepared to address some of their concerns. Working in a Western psychotherapeutic framework is often the default stance of counsellors. However, strict adherence to this framework may be inadequate for truly understanding and ameliorating their clients’ distress. There appears to be a host of multicultural factors involved in the interpretation of mindfulness meditative experiences (Djikic, 2014). Appreciating these complex cultural issues will enable counsellors to be better prepared to assist individuals as they deal with the challenges that can arise in mindfulness practices.
Conclusion

Mindfulness meditation has evolved considerably over time. From a technique originally used to gain insight into the foundational philosophy of Buddhism, it has become increasingly separated from its religious and cultural roots in recent times. Through the process of secularization that started with a number of notable figures, including Jon Kabat-Zinn, Jack Kornfield, and Mark Epstein, mindfulness as an isolated technique was applied to a variety of medical and psychological issues (e.g., Goldenberg et al., 1994; Kabat-Zinn, 1992; Speca et al., 2000). To increase its cross-cultural appeal, a reductionistic approach was taken towards the practice (Salmon et al., 1998). While mindfulness meditation has shown to be beneficial in a number of settings, a more comprehensive picture of the practice is warranted as the literature suggests adverse experiences can arise for some individuals. Thus, the present study will explore individual experiences with adverse effects of mindfulness meditation, the individual and sociocultural contexts, and methods of coping with the effects.
Chapter Two: Literature Review

In the research literature, the purpose, nature, and goals of mindfulness practice differ from original conceptualizations. Thus there is a discrepancy between Western conceptions of mindfulness and its original religious and cultural context, as the latter has not been carried forth into popular understandings of mindfulness. Consequently, a typical Western mindfulness practitioner may lack a thorough understanding of the practice and have unrealistic expectations about its benefits. While mindfulness does show significant positive benefits in a wide-range of settings, its potential to cause harm has not been adequately explored in the literature. An examination of its suitability for people practicing in a variety of settings will provide a richer understanding and more balanced picture of the practice for both lay practitioners and researchers.

The literature review will begin by exploring the theoretical foundations of mindfulness in the Theravadin Buddhist tradition. The second section will address mindfulness’ extraction and integration into a secular, psychotherapy framework. The third section will explore Buddhist perspectives on mindfulness’ potential to cause adverse experiences. Finally, the fourth section will address the limited body of research that has touched, directly and indirectly, on adverse mindfulness experiences and their risk-factors.

Historical Roots of Mindfulness in Buddhism

This section illuminates mindfulness’ roots in various terminologies, theories, and practices found in Buddhism. Appreciating the original cultural and religious basis of mindfulness is important for developing a preliminary understanding of the context of adverse experiences.
Mindfulness Terminology

One of the first introductions to the concept of mindfulness appears in the Pali Canon, a Theravadin Buddhist collection of texts (Mikulas, 2007; Thera, 1998). The term sati has been used in the Pali Canon in association with mindfulness (Buddhaghosa, 2010; Thera, 1998). The closest English translation of the term sati means to recollect or to remember the present moment (Bodhi, 1999; Buddhaghosa, 2010). Meditation is referred to in the Pali Canon as bhavana and, when translated, refers to the intentional cultivation of the mind (Amaro & Pasanno, 2009; Solé-Leris, 1992). Taking these two terms together, sati-bhavana or mindfulness meditation, can be understood as intentionally remembering the true nature of phenomena within the present moment through the cultivation of the mind (Bodhi, 1999).

Other references to mindfulness include the term sati-patthana, where sati refers to the ‘bare attention’ used to study the mind, and patthana means awareness (Namto, 2011). Together, sati-patthana is the cultivation of attention and awareness of the present moment. This second conceptualization is similar to how Western scholars have understood mindfulness and applied it in the field of psychotherapy. Understanding the various foundations of the terminology used within this field highlights the complex historical nature of mindfulness and the difficulties that can arise when interpreting the concept even through a Buddhist lens.

Theory of Mindfulness Practice

Mindfulness is one aspect of the Buddhist Eightfold Path (Bodhi, 1999). The Nagara Sutta in the Pali Canon describes the Eightfold Path as a perspective on how suffering arises and how it can be ended (Bhikkhu, 1997). The Eightfold Path includes Right View, Right Intention, Right Action, Right Speech, Right Livelihood, Right Effort, Right Mindfulness, and Right Concentration (Bhikku, 1997). These tenets are divided into three broader catego-
ries of personal development: wisdom, moral discipline, and concentration (Bodhi, 1999; Sayadaw, 2005). Skillful mindfulness is an aspect of the development of concentration. All three aspects, however, are meant to work in a syncretic fashion to help the practitioner in striving towards the goal of liberation from suffering. From a Buddhist perspective, this can be achieved in part by recognizing the three characteristics of phenomena: all phenomena are impermanent, have the potential to create suffering, and are empty of inherent existence (Thera, 2006). Buddhism posits that developing a clear understanding of these characteristics, as they relate to the self and the world, is the key to alleviating suffering. In other words, a distorted view of the self and the world leads to craving and attachment, which is said to be the root of suffering. This notion in particular will be important for understanding how practitioners in the secular world conceptualize self-liberation and distortion differently based on Western cultural values.

The Eightfold Path is a comprehensive approach that is said to lead the practitioner to liberation from suffering (Bodhi, 1999). Another Pali text, the Mahacittarisaka Sutta, describes how the components of the Path intertwine to support their concurrent development (Bhikkhu, 2008). Buddhism understands that the practice of mindfulness is to be complemented by other techniques, because it alone may be insufficient to bring about the goals of personal transformation and self-liberation (Aronson, 2014; Bhikku, 2008; Mace, 2007; Thera, 1998; Rapgay & Bystrisky, 2009). For example, the practice needs to be accompanied with clear comprehension and other supporting practices, such as the practice of ethics and wisdom (Mace, 2007; Namto, 2011; Thera, 1998; Rapgay & Bystrisky, 2009). In other words, it is necessary for the meditator to have a firm theoretical grounding to resist being led astray by the mental distortions that may be encountered during mindfulness practice.
(Thera, 1998). Thus, according to early Buddhism, mindfulness as part of a holistic plan can result in insight into the true nature of phenomena, with a reduction in mental and physical suffering over time being a natural by-product of this insight (Namto, 2011).

**Mindfulness Practice in the Buddhist Context**

To gain some perspective on why individuals have adverse experiences when practicing mindfulness, it is necessary to understand the foundations of this practice in its original Buddhist context. Western meditators have practiced mindfulness without incorporating its original theoretical or contextual basis. When practiced in accordance with knowledge found in the *Suttas*, mindfulness can help the individual develop in a healthy manner. Since mindfulness practice drawn from the Theravadin Buddhist tradition is widespread in both lay and medical settings, it is important to appreciate how it has been practiced in this tradition in order to understand its later modification by the West.

In the Theravada Buddhist tradition, mindfulness meditation is comprised of two mutually enhancing approaches to mental training. The first is *samatha-bhavana* (or *samadhi-bhavana*) which refers to the cultivation of concentration that ultimately results in tranquility (Ledi, 1999; Namto, 2011). In this practice, the individual narrows their attention to a single point, often by focusing on the breath, in order to cultivate relaxation and calm (Namto, 2011). The second aspect of mindfulness is *vipassana-bhavana*, which involves the development of insight by broadening the field of awareness and exploring mental processes (Namto, 2011). These approaches are to be developed sequentially then utilized simultaneously (Thera, 1998). Practitioners are first to develop a calm, focused state of mind via *samatha-bhavana* in order to lay the foundation for the broadened awareness and exploration that occurs in *vipassana-bhavana*. Practicing mindfulness in this traditional manner prepares
the individual to cope with the arising of difficult mental contents and physical sensations (Namto, 2011).

**Complexities and Tensions: Integrating Mindfulness into a Western, Psychological Framework**

A cursory examination of the literature suggests that mindfulness and psychotherapy are mutually appreciated by their respective communities. The quote below illustrates the current state of mindfulness meditation’s integration in the West.

> We live and practise in a psychoanalytic universe in which Buddhist teachers are in therapy, psychoanalysts meditate, and spiritual seekers simultaneously pursue contemplative paths and analysis (Rubin, 1996, as cited in Safran, 2003).

While mindfulness seems to be similarly valued alongside traditional psychotherapy, the mindfulness that is being practiced has been distorted through a Western cultural lens. Consequently, there are several culturally-rooted differences that have complicated mindfulness’ integration in Western settings.

Walsh and Shapiro (2006) have suggested that the integration of meditation into psychotherapy has evolved over the last century, unfolding in three stages. First, it began with psychotherapy’s relative ignorance of Buddhist perspectives towards healing. Then it moved on to pathologizing those perspectives. And now the psychotherapy community is progressing towards mutual appreciation (Walsh & Shapiro, 2006).

However, psychotherapy has generally lacked a genuine appreciation of mindfulness in its original form. This is unsurprising as it was stripped of its religious and cultural roots early in its introduction to a wider secular audience (Salmon et al., 1998). Salmon et al. (1998) suggest that this occurred to increase its applicability in a wide-range of settings and
that other aspects of mindfulness may not be necessary to experience positive results. While this perspective has been challenged (e.g., Rapgay & Bystrisky, 2009), the prevailing notion within the scientific research community is that aspects of mindfulness practice can be selectively chosen and applied to a variety of issues. This decontextualization and subsequent re-contextualization of mindfulness in a Western psychotherapy framework has resulted in considerable discrepancies from original practices and goals (Walsh & Shapiro, 2006). Western psychology’s “colonization of the mind” (Marsella, 1998, p. 1286) has led to an overvaluation of psychological conceptions of health and pathology. Thus, while the literature bridging mindfulness and psychotherapy (e.g., Hayes, Strosahl, & Wilson, 1999; Kabat-Zinn, 1982; Linehan, 1993; Segal, Williams, & Teasdale, 2002) reflects a stage of mutual appreciation, it fails to account for the broader complexities of integration.

These complexities result from a tenuous translation of the original religious and cultural contexts into the teaching and practice of mindfulness in secular spaces (Aronson, 2004). Tensions can arise as individuals try to balance different perspectives on health and pathology. Deconstructing these tensions and complexities of integration is necessary to understand adverse experiences in secular practices of mindfulness meditation.

Integrating mindfulness in a way that remains authentic also comes with certain difficulties. First, difficulties can arise due to divergent theoretical notions about the purpose of mindfulness as it relates to notions of the self as well as broader goals of wellness. Second, the form and structure of mindfulness practice within secular spaces tends to differ from its original context. Specifically, it lacks the original balance of developing ethics and wisdom in conjunction with concentration and vipassana practices. Without such theoretical and prac-
tical grounding, the outcome of mindfulness practice in secular spaces can differ considerably from its original context (Thera, 1998).

**Theoretical Differences: Perspectives on the Self and Wellness**

Western mindfulness practice may differ from traditional Buddhist practice due to differences in cultural values. The main source of the divergence in Western practice is tied to incongruent culturally-rooted perspectives on selfhood. These differing notions of selfhood can result in vastly different conceptualizations of what it means to be healthy. Untangling the cultural roots of these differences can help us understand one potential source of Western practitioners’ experiences of adverse effects.

Different conceptualizations of the self can lead to tension when mindfulness is incorporated within a Western, psychologically-based framework. First, it will be necessary to delineate the two notions of selfhood that relate to this discussion: the ontological and relative self (Aronson, 2004; Engler, 2003). Buddhists regard mindfulness as a method for deconstructing the ontological self (Engler, 2003). Contrastingly, understandings of mindfulness in lay and counselling settings in the West typically fail to make the distinction between the ontological and relative (i.e., psychologically-based) self (Aronson, 2004; Engler, 2003). Buddhism posits that the psychological notion of a substantial self is inaccurate because the self is ultimately conditional and impermanent. The psychotherapeutic research literature suggests that, based on an inadequate understanding of this Buddhist ontological ‘empty-self’, mindfulness has been employed as a method for addressing the psychological self (Engler, 2003; Walsh & Shapiro, 2006). This is typical of many popular Western psychotherapies in that they do not attempt to challenge the underlying self-structure, believing it may be necessary to function in secular societies. According to Engler (2003), Buddhist perspec-
tives disagree with using mindfulness solely to target the psychologically-based self. When it is used in this manner, there can be two consequences. The first is that abiding beliefs about the self remain untouched and consequently, mindfulness reinforces psychopathology (Engler, 2003; Suler, 1993). Secondly, and equally concerning, is that practitioners can be surprised and even traumatized when their mindfulness practice fulfills its original purpose by disrupting the foundations of the self.

These consequences of mindfulness practice imply a deeper divide between Eastern and Western conceptualizations of the self and notions of what is considered a ‘healthy’ self in each of these cultures (Bradwejn, Dowdall, & Iny, 1985; Djikic, 2014). Buddhists consider the self to be embedded in a network consisting of other people, objects, and the broader universe (Engler, 2003). This self is said to be empty of inherent existence due to its dependence on external and internal processes. Buddhists regard the notion of a stable, differentiated, and unchanging self as an unattainable illusion and the root of suffering (Engler, 1986; Thera, 2006). Thus, in the Buddhist view, true comprehension of the empty self is an important factor for the cessation of suffering and one of the goals of mindfulness practice. Western perspectives generally regard the self as an autonomous entity (Engler, 2003). Following from this notion, the goal of Western psychotherapy is to help construct a coherent, differentiated, and stable self in order to attain wellbeing. The tension that results from these contrasting conceptualizations of health can prompt feelings of dissonance in the individual as they practice mindfulness. For example, Wells (2002) raises some concern that secular mindfulness could increase symptoms of psychopathology in those with anxiety because of the undue attention that is placed on the self to achieve psychotherapeutic goals. The Western, psychodynamically-rooted goal of the integrated and autonomous self appears to permeate the practice
of mindfulness in secular spaces and conflicts with its Buddhist roots (Perez-de-Albeniz & Holmes, 2000).

Jack Engler (2003) has been instrumental in trying to bridge the gap between Western, psychodynamically-rooted understandings of the self and Buddhist-based ones. He posits that Eastern ideals become distorted when practiced in the West because of these different underlying assumptions about health and wellness. Engler (2003) suggests that Western practitioners often gravitate towards mindfulness in order to circumvent self-related psychological issues, echoing John Welwood (2000) who coined the term *spiritual bypassing*. This term refers to the tendency of Western practitioners of mindfulness to misinterpret the theoretical basis of the practice. For example, the Buddhist concept of the empty self can be misinterpreted in a nihilistic manner. Consequently, mindfulness meditation can exacerbate underlying psychological issues that have not been addressed prior to practice (Welwood, 2000). Engler’s (2003) solution is for Western practitioners of mindfulness to focus on being “somebody” before they become “nobody” (p. 35). That is, individuals need to be relatively psychologically-integrated to be able to tolerate mindfulness because it can lead to unexpected encounters with the true nature of the self. Engler (2003) posits that “it takes certain ego capacities just to practice meditation” (p. 36) and Western practitioners may not be prepared for the disruptions to selfhood that may occur through mindfulness meditation.

Psychotherapists (Engler, 2003; Shapiro, 1992a, 1992b) as well as Buddhist scholars (Buddhaghosa, 2010; Namto, 2011) similarly acknowledge that the path towards subjective wellness requires a period of destabilization. In mindfulness, this destabilization occurs when one broadens the field of awareness through *vipassana* so both positive and troubling aspects of the self, others, and the world become conscious (Del Monte, 1987 as cited in Perez-de-
Albeniz & Holmes, 2000). This process of illumination can be overwhelming if one is not prepared. Both schools of thought similarly posit that the development of stability and wisdom occur in a stepwise process (Engler, 2003; Namto, 2011; Rapgay & Bystrisky, 2009). Engler (2003) suggests that through psychological development, practitioners can acquire a certain level of cognitive strength and emotional flexibility. These abilities would then allow them to tolerate the inevitable experience of discomfort and distress that occurs in mindfulness practice. In psychoanalytic terms, a strong ego facilitates observation and attention to the present moment (Engler, 2003). With the assistance of a strong ego, this period of destabilization can then lead to deeper integration of troubling aspects of the self. Psychology’s focus on building cognitive and emotional strength can be useful for preparing and supporting individuals in their mindfulness practice, especially when negative experiences arise.

While Buddhist monks have accounted for these understandings through their own methods of teaching and practicing mindfulness, their knowledge appears to be lost when mindfulness is taught in secular spaces in the West (Aronson, 2004; Engler, 2003).

**Practical Differences: Mindfulness Practice in the West**

Western, secular versions of mindfulness practice can differ from Buddhist forms in terms of how it is practiced. In a quest to distill mindfulness into its most essential components, secular interpretations fall short of capturing the holistic and systematic nature of its classical form (Rapgay & Bystrisky, 2009). There are two features that differentiate Western practice of mindfulness from Buddhist versions. First, the practice has been extracted from the holistic context of the Eightfold Path. Second, applications of mindfulness in lay settings in the West generally fail to implement the practice in a careful and systematic manner. Un-
derstanding these features of Western practice of mindfulness will illuminate potential sources of adverse experiences.

Mindfulness has been applied and practiced in the West isolated from a system that was meant to assist in nurturing positive personal growth. While psychology has reduced mindfulness to simple attention to and awareness of the present moment (Brown & Ryan, 2004), this understanding fails to appreciate that mindfulness is embedded in a way of living that includes other tenets of the Eightfold Path. These tenets are grouped into categories relating to the development of ethics and wisdom (Sayadaw, 2005). According to several Buddhist monks’ discussion of the Eightfold Path, mindfulness practice needs to be developed alongside these other tenets for the individual to experience sustainable, positive results as well as to mitigate negative ones (Bodhi, 1999; Namto, 2011; Thera, 1998).

The development of ethics involves cultivating other aspects of the Eightfold Path, specifically, Right Speech, Action, and Livelihood (Thera, 1998). That is, mindfulness needs to be grounded in a particular moral framework that involves compassion and non-harmful living (Mace, 2007; Rapgay & Bystrisky, 2009). Next, while some secular versions of mindfulness use it to develop awareness, in the Buddhist perspective the development of awareness is ultimately tied to notions of wisdom (Thera, 1998). Wisdom requires an understanding of Right View and Intention, aspects of the Eightfold Path. Most importantly, Right View refers to an understanding of the aforementioned three marks of existence (i.e., impermanence, suffering, and emptiness; Thera, 2006). When practitioners are taught to develop awareness through mindfulness it should be with these insights in mind.

The second manifestation of mindfulness’ decontextualization in the West is the neglect of the original systematic approach to the practice. Buddhist teachers (Namto, 2011;
Thera, 1998) view concentration and insight meditation as mutually enhancing practices, while secular applications of mindfulness have separated these components. As previously described, though lay settings typically centre aroundvipassana (Gilpin, 2008), the research literature in the West has almost solely focused on applications of concentration meditation (Mikulas, 2007). As a result of this myopic focus on concentration, mindfulness has been erroneously equated with an aspect of the practice that tends to lead to feelings of calm and tranquility. However, these feelings are quickly found to be ephemeral in nature and without the support of insight, can lead to disenchantment with mindfulness practice. While both concentration and insight practices can lead to problems, engagement in insight meditation can be particularly disruptive if the individual is unprepared (Namto, 2011). Thus, the practice of mindfulness in secular contexts does not appear to carry with it an awareness of how these two aspects of mindfulness are necessary for both mitigating risk and achieving the ultimate goal of insight.

In summary, according to Aronson (2004), teachers and students do not appear to be sufficiently acquainted with the cultural differences and complexities that can arise when mindfulness is practiced in secular environments. Mindfulness in the West generally lacks the holistic framework of ethics and wisdom as well as the systematic approach to its application. These aspects of mindfulness practice were part of the original Buddhist approach to minimize risk and their absence may to lead to an increased likelihood of having adverse experiences (Namto, 2011).

**Adverse Experiences**

Adverse experiences in mindfulness meditation appear to be relatively common in both Buddhist and Western contexts. By reviewing the seminal teachings of Buddhist monastics, it is evident that they expected difficulties to arise when practicing mindfulness medita-
tion and identified several potential areas of concern (Buddhaghosa, 2010; Namto, 2011). These include how the practice is learned, the quality and experience of mindfulness teachers, and individual propensities for negative experiences.

Many Western scholars are relatively unaware of the potential for mindfulness to lead to negative experiences, which is partly due to a disconnection from the origins of the practice. Nevertheless, the psychotherapy literature shows that there has been a growing awareness of the potential for mindfulness to cause difficult experiences. This awareness began with observations of individuals who had negative experiences through other meditative practices and grew further when attrition rates for mindfulness-based interventions were acknowledged. While there has been only one study of the full range of effects that mindfulness can elicit, this study was conducted in a retreat setting and thus may not be applicable to the majority of mindfulness practitioners. Finally, in support of the research literature, clinicians have also observed that mindfulness may not be suitable for certain individuals due to psychological vulnerabilities.

Buddhist Perspectives on Mindfulness’ Adverse Effects

Buddhism is well-acquainted with the various ways mindfulness meditation can elicit negative effects and developed practical methods for avoiding these risks. The first suggestion is that concentration and insight meditation need to be approached deliberately. Secondly, practitioners need the support of an experienced and qualified teacher. Finally, practitioners need to possess a certain amount of cognitive and emotional flexibility to appropriately respond to and contextualize their experience.

Namto (2011), a Theravadin Buddhist monk, reflects the understandings of his community by stressing that extensive practice of concentration meditation, or premature en-
gagement in insight meditation, may cause difficulties. Consequently, it is necessary for the practitioner to balance the intensity of their concentration practice with the cultivation of insight. An overdeveloped concentration practice can lead to dissociation. Alternately, a lack of strength in concentration can result in the mind being overwhelmed by difficult mental or physical experiences that may arise during the course of insight meditation. For example, Namto (2011) suggests that mindfulness meditation can be “dangerous” (p. 8) when actively repressed mental contents return with “greater intensity” (p. 8). This can occur when concentration practice is underdeveloped or when insight practice is undertaken too early. When the practices are in balance, concentration can temporarily abate extreme emotions in order to facilitate the exploration of the mind (Namto, 2011). Thus, a systematic approach to mindfulness practice is important for mitigating the likelihood of experiencing lasting problems.

Secondly, an experienced teacher can provide the practitioner a safe and relatively structured method for developing insight. The teacher’s knowledge and experience can support the practitioner in recognizing and avoiding harm. Buddhist teachers understand that individuals who practice mindfulness haphazardly or indiscriminately, without deliberate guidance, risk “mental imbalances” (Namto, 2011, p. 9). Nevertheless, if individuals do encounter difficulties, Namto (2011) suggests that they resist ceasing their practice. While this may be sound advice for those with support from an expert teacher, for others, further practice can irrevocably disrupt mental stability. Without the support of an experienced teacher to guide the practitioner through intense experiences, the practitioner can become increasingly distressed and overwhelmed (Namto, 2011). Thus, it is important to determine the risk factors of lasting adverse effects as well as the appropriate support measures that can be taken to reduce the likelihood of having these experiences.
Namto (2011) suggests a number of methods to mitigate risk once negative experiences have occurred. The first involves switching to another form of meditation practice depending on the nature of the adversity being experienced (e.g., switching to walking meditation when experiencing overwhelming cognitions; switching to sitting meditation when experiencing difficult physical sensations). Second, the practitioner can open his or her eyes to diminish the intensity of memories, images, and fears. Finally, more skilled practitioners can revert to concentration meditation to moderate the flow of intense experiences (Namto, 2011). In order for practitioners to remain flexible enough to adjust their practices accordingly, they need the support of an experienced teacher as well as cognitive and emotional flexibility.

According to some Buddhist teachers, an individual’s ability to successfully navigate these difficulties is predicated on individual factors, like mental strength, and the guidance of an experienced teacher (Namto, 2011; Thera, 1998). While Buddhist teachers understand that mindfulness can cause difficulties, they tend to frame this as a natural part of a process that ultimately results in greater insight and wellbeing. In order for Western practitioners to contextualize their experiences in this way they will need to possess cognitive and emotional flexibility. While the ability to understand their experience through this Buddhist lens may be possible for many practitioners, some may not be suited for continued practice due to insufficient flexibility and knowledge. For certain individuals, mindfulness practice can result in lasting adverse effects that cannot be resolved through meditation alone. However, it is currently not known why adverse experiences occur and linger for certain individuals and not for others (Shapiro, 1992a).
Buddhist teachers are aware that mindfulness meditation can lead to adverse experiences if it is practiced haphazardly and without support. This is concerning since media depictions suggest that many individuals who practice mindfulness meditation in the West often do so alone or without the support of a qualified teacher (Widdicombe, 2015). However, there is a lack of empirical knowledge about the types of people who may be predisposed to experiencing lasting negative effects. Buddhists and Western scholars are in agreement that a certain level of mental strength and flexibility is required to prevent lasting adverse effects. Beyond individual factors, negative experiences are also contingent on the level of support and training that practitioners receive. Thus, due to these individual and contextual factors, practitioners engaged in mindfulness meditation programs risk exacerbating negative experiences. Nevertheless, despite an apparent awareness of these risk factors, the nuances and contextual factors have not been systematically explored in community-based environments.

Western psychotherapy literature on mindfulness meditation has yet to investigate many of these Buddhist insights. While the literature has tentatively acknowledged that certain individuals may be more inclined to experiencing difficult and lasting negative experiences, researchers have been slow to account for other potential sources of these difficult experiences including for example, teaching effects as well as the manner in which mindfulness is being administered in these settings.

**Psychotherapy Literature on Mindfulness’ Adverse Effects**

The body of literature relating to mindfulness meditation’s potential to elicit adverse effects is scant. It is unclear whether this is due to ignorance or a willful disregard for the full-range of mindfulness’ effects, but it appears that researchers have been hesitant to contradict the dominant discourse surrounding mindfulness meditation. Despite this, there is a
long history of research examining negative effects stemming from other meditative practices. Since then, much of the research has indirectly covered individuals who have had problems with mindfulness meditation in investigations of mindfulness-based interventions. Next, it will be necessary to interrogate two interrelated studies (Shapiro, 1992a, 1992b) that have specifically examined the potential negative impact of mindfulness meditation within a *vipassana* retreat setting. The final section will contain a discussion of the clinical, theory-based literature.

**Adverse effects of meditation**

While there is a notable paucity of literature on mindfulness meditation’s adverse effects, there have been numerous case studies documenting the negative effects individuals have experienced through participation in a broad range of meditative practices. The case studies have shown that meditation can be risky for those who have a prior psychiatric diagnosis as well as those who have not had a diagnosis before engaging in meditation. While the specifics of these meditative practices may differ from mindfulness meditation, the contextual factors suggest an underlying similarity between a variety of meditative practices and mindfulness meditation.

Two meta-reviews compiled numerous case studies and limited empirical research to explore the potential for meditation to elicit adverse effects. Perez-de-Albeniz and Holmes’s (2000) review of the adverse effects of meditation showed that experiences like dissociation, grandiosity, hallucinations, restlessness, anxiety, depression, uncomfortable physical sensations, and feelings of guilt and ‘defencelessness’ have occurred in meditators. A relatively recent meta-review (Lustyk et al., 2009) also conducted a focused exploration of meditation’s potential to elicit difficult and even deeply traumatic experiences. Their review found that
numerous case studies have addressed this issue in a variety of meditative practices (e.g., Castillo, 1990; Chan-Ob & Boonyanaruthee, 1999; French, Schmid, & Ingalls, 1975; Lazarus, 1976; Persinger, 1984; Sethi & Bhargava, 2003; Yorston, 2001) and particularly within mindfulness meditation (e.g., Kennedy, 1976; Shapiro, 1992a, 1992b; VanderKooi, 1997). Taken together, these studies suggest that meditative practices can be risky for certain groups of people. For example, meditation has the potential to precipitate latent issues in psychologically vulnerable individuals (e.g., Walsh & Roche, 1979). Side effects from meditation can range from boredom (Shapiro, 1992b) to psychosis (e.g., Kuijpers, van der Heijden, Tuinier, & Verhoeven, 2007; Sethi & Bhargava, 2010; Walsh & Roche, 1979). The adverse reactions were found to fall under three categories: effects on psychological health, effects on physical health, and effects on spiritual health (Lustyk et al., 2009). These meta-reviews offer a preliminary acknowledgement of meditation’s adverse effects, signalling a need for a more focused empirical exploration of these issues.

Scholars have slowly begun to recognize that meditative practices can exacerbate certain psychiatric or personality propensities (Engler, 2003; Suler, 1993). Case studies conducted by Walsh & Roche (1979) support the notion that stress combined with a lack of sleep and a lack of food can precipitate a psychotic episode in psychologically vulnerable individuals. They suggest that these individuals lack the cognitive flexibility required to remain stable and integrate their experiences (Walsh & Roche, 1979). For example, Kuijpers et al. (2007) outlines a case of a young man with a history of mild depressive episodes and one instance of hypomania. A brief acute psychotic episode was induced through an intensive, self-guided meditation, which did not include limiting food intake or sleep. However, there were also circumstances in his life that could have contributed to the episode, including work and
relationship stress. Of particular interest, two popular personality tests, the Minnesota Multiphasic Personality Inventory-2 and NEO Five-Factor Inventory, suggested potential problem areas in his personality structure (Graham, 2006; McCrae & Costa, 2004). These problems included deficits in emotional intelligence and a propensity towards experiencing anxiety and depression (Kuijpers et al., 2007).

Kuijpers et al. (2007) also reviewed other studies that addressed cases of meditation-induced psychosis (e.g., Chan-Ob & Boonyanaruthee, 1999; French et al., 1975; Hanssen, 1981; Lim & Lin, 1996; Sethi & Bhargava, 2003; Shan, 2000; Trujillo et al., 1992; Walsh & Roche, 1979; Yorston, 2001; Xu, 1994). They found that the psychotic episodes that were elicited were acute and brief, and the typical treatment was the administration of anti-psychotic medications. What is most relevant here, however, is that only half of those studied had a previous psychiatric history, and even fewer had a history of psychotic symptoms (Kuijpers et al., 2007).

Evidently, issues can also arise in those without a previous history of psychological issues (Dobkin, Irving, & Amar, 2011). Sethi and Barghava (2010) detailed a case of young man with no previous history of mental health issues who experienced a psychotic episode following a period of ‘intensive’ meditation. The type of meditation was not specified but it was accompanied by fasting and reduced sleep. Symptoms included religious delusions, delusions of persecution, and auditory hallucinations. The man was treated with anti-psychotic medication, but he relapsed when he discontinued pharmacological treatment. While no previous psychological history was specified, understanding the precipitants of these negative experiences beyond the immediate causal factors is important for developing a better understanding of how these situations arise. Also, Yorston (2001) detailed a case of a young wom-
an with no previous psychiatric history who presented with symptoms of mania following a yoga and Zen-based meditation retreat. She was treated with anti-anxiety medication and twice-weekly psychodynamic therapy, but she refused to take medication to stabilize her mood. She continued to return to various meditation retreats and relapsed immediately following each return (Yorston, 2001). Her experience supports the argument that some populations may need mood stabilization prior to engaging in meditative practices (Dobkin et al., 2011; Engler, 2003).

The literature examining the negative effects of meditative practices shows that meditation can give rise to a host of negative experiences ranging from boredom to psychosis. A number of factors may increase the likelihood of having these experiences (Lustyk et al., 2009; Perez-de-Albeniz & Holmes, 2000). First, intensive retreats that involve extended sessions of meditating, fasting, and reduced sleep may elicit adverse experiences for some people (Walsh & Roche, 1979). Many of the individuals detailed in these studies had a previous psychiatric history and needed to be treated with pharmacology following their adverse meditative experience (Kuijpers et al., 2007). What is particularly striking, however, is that some of these individuals did not have a previous psychiatric history (Sethi & Bhargava, 2010; Yorston, 2001). Thus, there appear to be unknown factors related to the likelihood of experiencing adverse effects through meditative practices.

**Adverse effects of mindfulness: Indirect explorations**

Preliminary indicators of mindfulness’ potential to elicit adverse effects have been incidentally encountered in studies on mindfulness-based interventions. By inquiring about participants’ experiences in several studies, researchers have been able to document evidence of mindfulness’ negative effects. These indirect explorations of mindfulness’ adverse effects
show that the phenomenon has rarely been investigated in an in-depth manner. Nevertheless, these studies illustrate that many researchers have begun to consider the potential for mindfulness to cause difficult experiences.

Reviews conducted by Dobkin et al. (2011) and Walsh and Shapiro (2006) point out that the body of empirical research on mindfulness meditation has not focused on the adverse effects that can result from this practice. There are two reasons that suggest that mindfulness may not be beneficial for all types of people. First, attrition rates for mindfulness-based interventions indicate that individuals may possibly be encountering difficulties in their practice. Second, a considerable number of individuals continue to practice mindfulness despite experiencing distressing cognitions and emotions as well as displaying possible evidence of pathology (Lomas et al., 2014; Salmon et al., 1998; Sethi & Bhargava, 2010).

The high attrition rates for mindfulness-based interventions have warranted further exploration by researchers. Attrition rates for MBSR were assessed and found to be as high as 23% (Kabat-Zinn & Chapmann-Waldrop, 1988). For MBCT, these numbers are slightly lower, but they can still be as high as 17%. It is possible that the attrition rates for MBCT are lower than MBSR because the inclusion criteria for MBCT is stricter (e.g., depressive patients who have had at least three or more relapses; Crane & Williams, 2010; Segal, Teasdale, & Williams, 2002). While attrition can be due to a number of factors, the studies themselves suggest that it may be due to side effects that prevent individuals from fully participating in mindfulness-based treatments.

Exploring the side effects that prevent participants from completing treatment can contribute to a better understanding of the difficulties that individuals face in mindfulness practice. While it is rare for studies to investigate or comment on the side effects that have
resulted from mindfulness-based interventions, some have attempted to address these issues. For example, a study by Crane and Williams (2010) looked at the factors associated with attrition in an MBCT intervention with a sample (n=68) of individuals who had a history of suicidal depression. They found that 30% of individuals dropped out from the treatment group due to excessive cognitive reactivity, rumination, and “problem-solving deterioration following mood challenge” (Crane & Williams, 2010, p. 2). Cognitive reactivity refers to the activation of depressogenic styles of thinking that can occur from even slight changes in mood in those who have a previous history of depression. Participants who withdrew were also less likely to be on medication and tended to be younger in age (Crane & Williams, 2010). Similar to Yorston (2001) and Kuijpers et al. (2007) who suggested that some individuals may need to be stabilized with medication, it is likely that the use of anti-depressants can help individuals in this population to engage in mindfulness practice.

A number of extrapolations were posited by Crane and Williams (2010) to further explain why these particular individuals had experienced adverse effects. Within the sample of suicidal depressive patients, it was evident that certain individuals had significant issues with rumination and difficulties with confronting negative thoughts (Crane & Williams, 2010). Many of these individuals had a relationship with their thoughts that was based on avoidance and suppression. Mindfulness meditation forced them to confront their thoughts and create an alternate relationship with their negative cognitive patterns. The researchers suggested that difficult thoughts, sensations, and memories may linger just under the surface and can be triggered by meditative practices (Crane & Williams, 2010). Thus, it is important for researchers and participants to sufficiently prepare for possible adverse reactions to mindfulness meditation.
While Crane and Williams (2010) confirmed that attrition from their study was due to problematic cognitive styles, they did not explore whether there were gender differences in those who did have adverse experiences. However, another study by Lynch (2004) investigated women’s experiences with MBSR in a treatment group for fibromyalgia. Thirty-one percent of participants in her study did not attend the program long enough to receive the adequate ‘dose’ of at least four treatment sessions. It was found that these women were not able to attend due to difficulties with emotional regulation (Lynch, 2004). Those who were highly emotionally reactive tended to drop out of the study fairly early. Thus, similar to Crane and Williams’ findings (2010), it is likely that mindfulness posed some difficulty for these women when they were confronted with challenging cognitions. While these women’s difficulties appear to be relatively common among those who drop-out of mindfulness-based interventions, further investigation is warranted to explore these experiences.

Salmon et al. (1998) also found that participants had difficulties with directly confronting their experiences, despite this being the main purpose of mindfulness practice. They found that anxious participants with primarily somatic symptoms preferred mindfulness practices that were cognitive in nature, like sitting meditation. For participants whose anxiety was experienced more cognitively, they preferred practices that engaged their physical bodies, like walking meditation and yoga. Mindfulness, of course, causes individuals to confront experiences they have actively been avoiding (Crane & Williams, 2010; Namto, 2011; Salmon et al., 1998). Paradoxically, however, mindfulness is sometimes undertaken for the purpose of avoidance. This observation relates to Welwood's (2000) notion of spiritual bypassing. Thus, mindfulness can either unintentionally reinforce avoidant cognitive and behavioural patterns or force the individual to confront mental contents that they may not be prepared for.
It is still unclear what individual and social factors lead to the likelihood of experiencing either of these two adverse consequences of mindfulness practice.

While some participants drop out due to adverse effects, others continue to engage in mindfulness practice because they have certain personality propensities that attract them to it (Engler, 2003; Suler, 1993; Welwood, 2000). Suler (1993) found that by misinterpreting the Buddhist notion of the empty-self, individuals can use meditation to disavow problematic emotions like anger and fear. Vanderkooi (1997) conducted in-depth interviews exploring Buddhist retreat teachers’ perspectives on their students’ personalities and their relation to adverse effects. The Buddhist teachers noticed that students who were nervous or easily upset, emotionally volatile, more prone to rage and self-pity, or who lacked humility were more likely to experience adverse effects. Furthermore, students who practiced too much, who experienced excessive or diminished anxiety, and had less sadness or moments of clarity, had a higher likelihood of experiencing psychotic episodes. They also outlined a number of other factors that tended to precede psychotic episodes, including unhealthy preoccupations with non-ordinary states of consciousness (NSCs) and negative, bizarre, and fearful NSCs. Thus, over-identification with these states usually hinted at the possibility of disturbances arising. However, beyond psychosis, adverse effects and their relation to these risk factors were not explored further.

Lomas, Cartwright, Edginton, and Ridge (2014) documented negative experiences in community-based mindfulness programs. The researchers conducted a longitudinal mixed-methods study looking at 30 male participants’ experiences with mindfulness meditation. The qualitative portion of the study used narrative accounts, which were collected before and after a year of meditation, to identify themes in their experience. Thirty percent of the men
were surprised when confronted with the troubling contents of their psyche (e.g., thoughts of violence; Lomas et al., 2014). The researchers noticed that it took time for participants to “moderate the negative qualia” (Lomas et al., 2014, p. 218). The participants were taught cognitive skills such as decentering, refocusing attention, and reappraising their problems in order to understand their negative experiences differently. Ultimately, participants tended to frame their experience of adverse effects as part of a process that eventually led them to greater understanding and well-being. However, a majority of the sample was drawn from a single meditation centre in the United Kingdom and it is possible that the results are not reflective of the myriad of ways mindfulness can be taught, practiced, and understood. Moreover, the characteristics of the sample were not thoroughly explored (i.e., no reports of psychological history or any existing diagnoses) so it is unknown whether certain practitioners were more likely to experience these troubling cognitions and sensations. The study also used a maximum variation sampling strategy, which resulted in participants whose length of meditation practice varied considerably. However, no range was provided regarding this and the results of the quantitative analysis were not correlated with length of practice. Therefore, it is unknown when difficulties tended to arise or how long it typically took for participants to integrate them.

The literature on mindfulness-based interventions indicates that some individuals experience difficulties with mindfulness meditation. These difficulties can lead individuals to discontinue their mindfulness practice or, paradoxically, it can draw them closer in. Factors such as cognitive reactivity and emotional lability appear to be related to difficulties with mindfulness meditation. However, there has not been an empirical investigation of why certain individuals are drawn to mindfulness despite experiencing adverse effects.
Adverse effects of mindfulness: Direct explorations

The literature on the adverse effects of mindfulness still lacks a focused exploration of these aspects of the practice. While a limited number of researchers have provided brief comments on apparent difficulties faced by their research study participants (e.g., Crane & Williams, 2010; Lomas et al., 2014; Lynch, 2004), many have insufficiently documented participants’ experiences of these effects. To date, there has only been one empirical study that has investigated individual experiences of adverse effects in mindfulness meditation.

This study resulted in two publications (Shapiro, 1992a, 1992b) that investigated the experiences of 27 long-term (M=4.27 years) meditators following a vipassana retreat. Strikingly, close to 63% of participants experienced some adverse effects. Two individuals experienced profoundly disruptive negative effects. In one study, participants classified their experiences as ‘adverse’ or not (Shapiro, 1992a, as cited in Mace, 2008). Surprisingly, Shapiro (1992a) found that instead of experiencing a decrease in negative symptoms during the course of meditation practice, most participants found that they increased in intensity and frequency over time. Three-quarters of those who meditated at least 105 months had experienced negative effects, as opposed to only 40% of those who had meditated at least 17 months (Shapiro, 1992a). This contradicts other sources, which suggest that difficulties typically arise early in the meditative process (Crane & Williams, 2010; Lynch et al., 2004; Namto, 2011; Perez-de-Albeniz & Holmes, 2000; Vanderkooi, 1997). The adverse effects experienced included increased tension, boredom, pain, confusion with identity, relaxation-induced anxiety and panic, negativity, self-critical thoughts, depression, and issues with reality testing (Shapiro, 1992a, as cited in Mace, 2008). Adverse experiences were classified into three categories: intrapsychic experiences, interpersonal experiences, and societal adverse
effects. Most participants who experienced adverse effects found them to be intrapsychic in nature. Interpersonal effects included sudden realizations of judgement and unhappiness or distress in current personal and familial relationships (Shapiro, 1992a, as cited in Mace, 2008). Most interestingly, Shapiro (1992b) found that cognitions prior to meditation were correlated with experiences of adverse effects. This corroborates Suler (1993) and Engler’s (2003) observations that mindfulness practice can exacerbate certain mental propensities.

**Adverse effects of mindfulness: Clinical perspectives**

Parallel to the steady growth in empirical literature on this topic, a few clinicians have similarly observed that mindfulness can lead to adverse effects. These clinicians have noted that certain individuals, based on their psychological history and personality propensities, should not engage in mindfulness meditation. By acknowledging that mindfulness may not be suitable for all types of people, clinicians have supported the developing notion that mindfulness may not be a panacea.

In clinical settings, this notion was first explored by Shapiro (1994) who suggested that individuals who have a history of psychiatric disturbances should refrain from meditation. This includes those with a history of psychosis, somatization disorders, hypochondriasis, dissociation, and schizoid and schizotypal personality disorder. Shapiro (1994) suggested that meditation may overwhelm these individuals, but he did not provide detailed reasoning for his conclusions.

In *Mindfulness and Psychotherapy*, Germer et al. (2016) urge clinicians to be cognizant of the possible factors that may give rise to adverse reactions. Germer et al. (2016) state that individuals who “decompensate when cognitive controls are loosened should generally not do formal sitting meditation” (Germer et al., 2016, p. 128). This means that individuals
who lack cognitive strength and emotional resilience may be particularly susceptible to experiencing adverse effects through mindfulness meditation (Dobkin et al., 2011; Germer et al., 2016). Furthermore, individuals without these traits may be unable to make sense of the content that emerges. For similar reasons, Germer et al. (2016) also suggest that individuals with ‘fragile personalities’ should refrain from engaging in lengthy meditation (i.e., vipassana). However, he does not specify what clinical disorders these types of personalities refer to.

Didonna and Gonzalez (2009) recommend that patients who are dealing with feelings of emptiness (e.g., related to disorders like post-traumatic stress disorder, eating disorders, and schizophrenia) need the support of an “expert therapist” (p. 143) because difficult experiences, like panic and dissociation, are likely to arise through mindfulness practice. Developing an understanding of the qualities of these expert therapists and how they support their clients has important clinical implications. Clinicians and researchers alike should have a better understanding of how to prepare and support individuals in their mindfulness practice. While Didonna and Gonzalez’s (2009) suggestions appear to be astute clinical observations, they lack thorough investigation and are largely theory-based.

An examination of the clinically-based literature suggests that individuals who have experienced psychosis, who have personality pathologies, who are emotionally labile, or who lack the guidance of an experienced teacher, may be more likely to experience adverse effects through mindfulness. The clinical observations presented here (Didonna & Gonzalez, 2009; Germer et al., 2016; Shapiro, 1994) also appear to corroborate Buddhist teachers (Namto, 2011; Vanderkooi, 1997), Western scholars (Engler, 2003; Suler, 1993), and the research literature (Lustyk et al., 2009; Perez-de-Albeniz & Holmes, 2000) in suggesting that
certain individuals are more likely to experience adverse effects and may need to refrain from engaging in mindfulness practice.

**Summary of the Literature Review**

An examination of the literature indicates that researchers have begun to address the variety of adverse experiences that can occur through mindfulness meditation practice. These negative experiences can range from mildly disturbing to profoundly debilitating (Shapiro, 1992a, 1992b). The literature also suggests certain factors that make it more likely for individuals to have negative experiences in mindfulness meditation. These factors include emotional and cognitive reactivity, intensity of practice, personality factors, and a history of psychosis (Crane & Williams, 2010; Lynch, 2004; Shapiro, 1992a, 1992b; Vanderkooi, 1997; Walsh & Roche, 1979). Many of these studies detail the negative effects that can occur from long and intensive meditation practice, but they lack clarification and contextualization. Limited empirical evidence (Lomas et al., 2014) also suggests that adverse experiences may occur in less intensive, community-based programs and for those without a previous psychiatric history (e.g., Kuijpers et al., 2007). The literature currently lacks a focused exploration of the adverse effects that can be elicited in normal individuals who practice mindfulness meditation in various lay settings. To address this, the present study investigated normal individuals’ experiences of mindfulness meditation’s adverse effects, the individual and sociocultural factors that influence these experiences, and how individuals coped with their experience. These experiences were explored through in-depth semi-structured interviews. The themes in the participants’ experiences were analyzed using a grounded theory approach to develop an understanding of the adverse effects of mindfulness meditation.
Chapter Three: Methodology

This chapter outlines the methodology and procedures that were undertaken for this study beginning with a description of the rationale for the qualitative design. Following that, the study design and principles of grounded theory analysis will be covered. The subsequent section outlines the participant recruitment process and inclusion criteria. The final section details the procedures involved in this study. Specifically, it provides details of the sampling method, interview, data collection, data analysis, and it locates the researcher in the context of the study.

Qualitative Research Design: Rationale

The literature review suggests that the present study is one of the first to challenge the dominant discourse on mindfulness meditative practices. While popular conversations surrounding mindfulness have focused primarily on its positive effects, preliminary research suggests that, for some individuals, mindfulness can trigger distressing experiences (Shapiro, 1992a, 1992b). Despite this, researchers have been slow to directly investigate mindfulness’ potentially harmful effects and the contexts surrounding them. Thus, only two empirical studies to date have investigated adverse effects in individuals who participated in mindfulness meditation retreats (Shapiro, 1992a, 1992b). However, beyond the impact of length and intensity of practice that occurs in these settings, there is a lack of knowledge about how individuals practice and understand mindfulness. Limited research and anecdotal evidence suggest that adverse effects can also occur in individuals who practice in community settings (Lomas et al., 2014). This is the first study to focus on individual experiences with adverse effects, providing a wealth of information regarding the unique aspects of participants’ experiences as well as the individual and sociocultural contexts that give rise to them. We currently do not have a thorough understanding of the nature of these experiences nor the many
factors related to their onset and maintenance. Due to the exploratory nature of important questions surrounding the adverse effects of mindfulness, the present research necessitates a qualitative design to elucidate some of the answers.

There are still considerable gaps in the research community’s understanding of how mindfulness meditation can be studied using a qualitative design (Grossman, 2011). While the use of qualitative studies to investigate mindfulness-based interventions has increased in recent years, they still remain unpopular (Irving et al, 2012; Mackenzie, Carlson, Munoz, & Speca, 2006; Mason & Hargreaves, 2002; Smith, Graham, & Senthinathan, 2007). Qualitative methods have some advantages over quantitative methods with regard to the type and quality of data that can be collected. For example, one benefit of the qualitative approach is that it is “inductive and exploratory” (Deurr, 2004, p. 11). In other words, it uses qualitative data to form an understanding of the relationship between phenomena rather than relying on theory (Glaser & Strauss, 1967). This is well-suited for the present study as there is limited understanding of the adverse effects that can occur from mindfulness practice.

The effects of mindfulness have typically been studied using quantitative instruments like self-report questionnaires (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008; Chadwick et al., 2008; Lau et al., 2006). However, Grossman (2008, 2011) suggests that self-report questionnaires may be an invalid way of assessing mindfulness because definitions of the construct lack consensus. For example, the criteria in the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003), the most popular self-report instrument used in mindfulness research, erroneously equates mindfulness with attentiveness. In addition to the MAAS, other instruments that measure mindfulness also do not appear to capture the original Buddhist understanding of the term (Grossman, 2011). Grossman (2011) emphasized the
need for qualitative methods, especially ones that use interviews because they help to elu-
cidate unique characteristics of mindfulness practice and possibly bring forth “novel, as yet
unconsidered, categories of psychological effects associated with mindfulness” (p. 1039). An-
other reason qualitative methods may be pertinent is that the subjective nature of mindful-
ness appears to necessitate a method of accessing the data stored in practitioners’ narratives.
One would expect this data to contain a more nuanced depiction of individual experiences
with mindfulness and delineate their connection to sociocultural processes (Pidgeon, 1996).

Qualitative research is useful for elucidating the various contexts in which these expe-
riences are embedded (Mason, 2002). This method of inquiry focuses on individual and soci-
ocultural processes involved in mindfulness practice rather than its outcomes (McCleod,
2001). By contrast, quantitative research methods and tools are inadequate for capturing the
complex interactions that take place between individuals and the wider sociocultural envi-
ronment during mindfulness practice (Wertz et al., 2011). Shapiro’s (1992b) mixed methods
study has shown a link between cognitions present prior to practice and subsequent experi-
ences in mindfulness meditation. However, we do not know the content of these cognitions
nor the factors that mediate their expression. These factors include the type of training and
support received, the interpretation of mindfulness theory and practice, and the potential psy-
chological vulnerability of participants. The present study understands that adverse experi-
ences are influenced by these factors and embedded cultural and theoretical assumptions.
Thus, a considerable advantage to qualitative approaches is that they can uncover the “pro-
cesses or issues which are pivotal or central to some wider body of explanation or
knowledge” (Mason, 2002, p. 3). Thus, a qualitative methodology can be useful for collect-
ing information on mindfulness meditation that is currently lacking (Grossman, 2011).
These linkages between meditative practices and adverse experiences have provoked more questions than answers. Thus, while some case studies show that psychologically vulnerable individuals are more likely to experience adverse effects, especially from intensive meditation retreats (Kuijpers et al., 2007; Walsh & Roche, 1979), others document cases of individuals without a previous psychiatric history (Sethi & Bhargava, 2010; Yorston, 2001). There have only been two mixed methods studies to systematically interrogate factors underlying the relationship between adverse effects and mindfulness (Shapiro, 1992a, 1992b). However, these studies have solely focused on distressing experiences arising from mindfulness practices in retreat settings. These questions have not been systematically explored in other lay settings. Nevertheless, it is clear that individuals experience mindfulness in idiosyncratic ways (Lustyk et al., 2009). Qualitative methods can help illuminate the myriad ways individuals practice and interpret their experiences in mindfulness meditation.

An appropriate way to begin this exploration would be by investigating individual practitioners’ experiences of adverse effects from mindfulness meditation. In particular, the study will focus on what individuals have experienced, the factors that influenced these experiences, and how they coped with them. Approaching these research questions from the perspective of individual experience will provide a wealth of information on individual and sociocultural factors related to the onset of distress in mindfulness practice. This knowledge can also help clinicians to support and tailor interventions for those who have had difficult experiences in mindfulness practice. The researcher is optimistic that this study will lay a foundation for further quantitative and qualitative research on this topic. Therefore, due to the preliminary nature of the research questions, a qualitative approach is most suitable for investigating adverse experiences from mindfulness meditation (Mason, 2002; Payne, 2007).
Study Design

The guiding research question for this study is the following: What are the adverse experiences that occur in mindfulness mediation practice? This research questions includes an exploration of the contexts underlying the practice and the coping strategies used to deal with these effects. To address this research question, in-depth semi-structured interviews were conducted with a sample of eight men and women who experienced adverse events through mindfulness meditation. The results of the interviews were analyzed using a grounded theory approach (Glaser & Strauss, 1967; Pidgeon & Henwood, 1996; Strauss & Corbin, 1990).

Grounded Theory

Grounded theory is a qualitative method developed by Glaser and Strauss (1967), which has been modified over the years as a result of further refinement of its research methods (Corbin & Strauss, 2008). The approach provides a rigorous and systematic method for analyzing qualitative data in order to generate new theories (Glaser & Strauss, 1967). Grounded theory is appropriate for the present study because its methods of analysis are rooted in the data. Recent modifications of the theory acknowledge the reflexive influence of the researcher in shaping the resulting theory as well as subtle contextual interactions.

Since this is a preliminary investigation of mindfulness’ potential to elicit adverse effects, it is important to stay close to the data. The original grounded theory approach allows the data to guide and lay the foundation for theory-building. The notion that mindfulness can cause negative effects has scarcely been acknowledged in the literature and thus, an understanding of what these experiences are and why they occur is unclear (Walsh & Shapiro, 2006). A grounded theory approach can provide a way of interrogating individual experienc-
es with adverse effects in order to create a preliminary understanding of the factors and influences of these experiences.

Recent iterations of grounded theory acknowledge the role of the researcher’s subjectivity in interpreting the data. In contrast to Glaser and Strauss’ (1967) notion that meaning is inherent in the data, Charmaz (1995) acknowledges that grounded theory is a social constructivist method. Charmaz (1995) suggests that the researcher has a fundamental role in constructing meaning maps through interaction with the data. Pidgeon and Henwood (1997) used the term *theory generation* to suggest that the researcher’s questions, biases, decisions, and personal background shape the data. In this way, the researcher’s manner of employing this qualitative method is intrinsically tied to subsequent theories.

Grounded theory is rooted in symbolic interactionist perspectives, which means that its methods are intended to create meaning from interactions between individual experiences and wider sociocultural contexts (Pidgeon, 1996; Strauss & Corbin, 1990). This approach is well-suited to this study as it focuses on how psychological and sociocultural variables influence the experience of adverse effects in mindfulness meditation. The multiple conceptualizations and contexts of mindfulness meditation practice make the use of this approach particularly appropriate. More specifically, the individual’s interpretation of adverse experiences is influenced by their personal histories, sociocultural contexts, and the interview process. Ultimately, however, the focus of the grounded theory method is on elucidating the lived experiences of these broader contextual influences (Pidgeon & Henwood, 1996).

**Participants: Inclusion Criteria and Recruitment**

The research aims to elucidate participants’ experiences of adverse effects through their engagement in mindfulness meditation programs. In order to explore this question in an in-depth manner, a sample of eight participants were recruited to engage in an exploratory,
semi-structured interview that sought to understand their adverse experiences. Participants were recruited based on the following criteria:

1) They had practiced mindfulness for at least one year so that they would be able to discuss their experiences with some breadth and depth.

2) They had not practiced for longer than 10 years in order to maintain sample consistency.

3) They had not been diagnosed with a severe mental illness nor were they currently abusing substances.

4) They were willing to speak candidly about their experiences in English and were available for a face-to-face interview.

Recruitment was conducted through posters, online announcements, and through the researcher’s own contacts in the mindfulness community in Toronto (see Appendix A). The study announcements outlined the purpose and nature of the study, participant eligibility criteria, and the email contact of the researcher. The announcements were posted at community-based meditation centres, university campuses, and online message boards. Prospective participants were invited to contact the researcher to ask questions and gain more information about the study. The researcher provided them with an information sheet (see Appendix B) detailing the purpose, nature, and goals of the study. Once prospective participants expressed interest in the study, the researcher confirmed whether or not they met the inclusion criteria and provided them with an opportunity to review the consent form (see Appendix C). Confirmed participants were asked to provide their contact information (i.e., name, phone number, email address). The researcher then set up a meeting time via phone or email with these participants.
Procedures

Sampling method

The sample was chosen in accordance with grounded theory’s theoretical sampling method (Corbin & Strauss, 2008; Glaser & Strauss, 1967). Participants were selected for their potential to provide enough depth and complexity to expand the researcher’s understanding of mindfulness’ adverse effects. Grounded theory recommends that researchers use a relatively small sample because appreciating the unique complexity of participants’ experiences is valued over breadth and replicability of the findings (McCleod, 2001). The literature demonstrates a need for more studies to explore individual experiences with mindfulness meditation, especially in light of the researcher’s encounters with individuals who have experienced negative effects from mindfulness. Thus, the sample was comprised of eight people who had experienced adverse effects from mindfulness meditation.

Demographics Survey

Participants completed a brief demographics survey (see Appendix D), which asked for their age, occupation, education level, relationship status, current occupation, current religious affiliation, and years of mindfulness practice.

Semi-structured Interview

The study used a semi-structured, in-depth exploratory interview (see Appendix E) to investigate experiences of adverse effects from mindfulness practice. The semi-structured interview is the most widely used tool for data collection in qualitative research (Hugh-Jones, 2010). This method of qualitative inquiry allows for an open-ended exploration of participants’ subjective experiences, interpretations, and understandings of mindfulness meditation (Mason, 2002). The interview’s guiding questions seek to balance structure with flexibility. Thus, the guiding questions of the interview were drawn from the study’s research question
to ensure the accounts elicited remained relevant. At the same time, these questions were open-ended in order not to limit participants’ accounts of their experiences (Hugh-Jones, 2010). A grounded theory approach also allows the researcher to refine the interview questions based on preliminary data (Corbin & Strauss, 2008).

The interview questions were grounded in extant literature (e.g., Shapiro, 1992b) and informed by the research question. The interview included three open-ended questions that sought to understand people’s experiences of adverse effects. First, the researcher asked them to discuss the adverse effects they experienced through mindfulness meditation as well as the significance of these effects in the broader context of their lives. The second question inquired about possible sociocultural forces that may have influenced their experiences. Finally, the researcher explored how they coped with the adverse effects. These three main questions also included prompts to encourage deeper reflection and elicit more detail from participants’ narratives (Fassinger, 2005). In this way, the semi-structured interview reflects constructivist perspectives on grounded theory as it acknowledges the interaction between the researcher and participants in shaping responses (Holstein & Gubrium, 1997).

**Data Collection**

The interviews were conducted in a private office space at the Ontario Institute for Studies for Education (OISE) Psychology Clinic to ensure confidentiality and privacy. The interview process lasted approximately one hour, but not more than one and half hours. First, participants were guided through the informed consent document (see Appendix C) and invited to read it and ask questions. The informed consent document outlined the nature and details of the study. The researcher verbally provided details of the content of the document and reiterated that participation was voluntary, anonymous, and confidential, and that with-
drawal from the study was possible at any time. If they were still interested in participating in
the study, participants were asked to sign two copies of the informed consent document, one
for their records and one for the study to keep on file in a locked cabinet in a research office
at OISE.

Interviews were recorded using an audio recorder with the consent of the participant. Grounded theory also required the researcher to take notes both during and after the inter-
view process (Pidgeon & Henwood, 1997). These notes contain behavioural observations
during the interview and any preliminary interpretations of the data. The interview began
with a brief demographics survey (see Appendix D). Following that, the interview process
was guided by a semi-structured interview consisting of three main questions and several fol-
low-up questions. Due to the possibility that the topics discussed might be sensitive for some
individuals, participants were encouraged to pause the interview if they felt overwhelmed at
any point during the interview. The researcher validated and supported the participant when
this occurred. The researcher terminated the interview with a debriefing question so that par-
ticipants had an opportunity to clarify any of their responses as well as to provide feedback
on the experience of the interview. In accordance with grounded theory, the researcher then
asked for permission to contact the participants to obtain feedback after preliminary stages of
analysis. Participants were compensated $10 for their participation in the study. This amount
was appropriate because it was considered a token value and showed an appreciation for the
participant’s time and willingness to engage in an in-depth interview. The amount also cov-
ered transportation to OISE and parking on the premises where the private interview took
place. After the conclusion of the interview, the audio files were immediately transferred on-
to a password-protected and encrypted USB drive to ensure privacy and confidentiality.
Data Analysis

After the interviews, the audio files were transcribed line-by-line by the researcher to ensure accuracy and to develop a familiarity with the participants’ experiences. The transcripts were stored on a password-protected and encrypted USB drive for the duration of the study. Grounded theory requires the researcher to journal and write notes throughout the research process. This is intended to facilitate accountability and a richer connection with the process of analysis (Pidgeon & Henwood, 1997). Note-taking during the data analysis phase accounted for the researcher’s analytic decisions, insights, and subjective experience of the process.

The interviews were analyzed by looking for common themes and variations in the narratives (Pidgeon & Henwood, 1997). Data analysis conducted in accordance with grounded theory requires the researcher to remain relatively flexible. Flexibility and openness allows for novel meanings and themes to emerge from the interplay between the researcher’s interpretations and the data (Pidgeon & Henwood, 1996). The hallmark of the grounded theory approach is the use of constant comparison analysis during the coding phase (Glaser & Strauss, 1967). This method involves continually assessing the interrelations between codes and reorganizing, revising, and merging them to create novel thematic categories (Charmaz, 1995).

The first phase of the data analysis process is referred to as open coding and involves labelling each line of the transcript with descriptive words or phrases to account for the phenomena that emerge. The next is the axial coding phase, where commonalities between these descriptors are identified so that they can then be grouped into more meaningful, higher-order categories (Strauss & Corbin, 1990). Once these coding phases were completed, a
summary and thematic analysis of each interview was composed to send to participants for feedback. Participants were informed that their feedback is voluntary and they had one week to comment if they had any points of contention regarding the themes that were identified.

After this, a constant comparison analysis was used to shift focus to differences that exist within categories (Pidgeon & Henwood, 1996). In this way, the creation of distinct higher- and lower-order categories can account for the variance in the data collected. These codes were then be revised and reorganized by taking a broader perspective of these categories and the themes that emerged from them.

This process was continued until the data reached theoretical saturation and no new categories were identified. That is, the data was encompassed by the categories that have already been identified (Charmaz, 2006). While categories that perfectly capture all of the data are unrealistic, grounded theory seeks to account for the majority of the information collected. The categories were then weaved to construct a model of the phenomena. In the context of this study, the resulting model helps to explain people’s experiences of adverse effects in mindfulness meditation. According to Glaser & Strauss (1967), however, this model is provisional and open to new emerging perspectives or interpretations of the data.

**Locating the Researcher**

A constructivist approach to grounded theory makes it necessary to “name the researcher’s position and assumptions at the outset of the research and acknowledge the impact they may have on the data” (Deurr, 2004, p.11). A few personal experiences of the researcher have informed the direction of this study. First, while the researcher has practiced mindfulness for over seven years and can personally attest to its ability to strengthen attention, awareness, clarity, and well-being, these experiences have not been the result of a linear pro-
cess. The researcher had a few mildly difficult experiences that occurred early in her practice. She has also encountered a number of people through her role as a co-facilitator of an MBSR program and through mindfulness groups in the community who had experienced more significant difficulties. While those experiences influenced the research question of this study, the researcher sought to mitigate the impact of her personal perspectives on the collection and interpretation of the data.

There are a number of ways that the researcher sought to reduce researcher bias in this study. First, the researcher maintained a journal to document and reflect on her experiences, assumptions, biases, and decisions as they related to the interview and analytical process. Using a journal in this way prevented her from straying from the data (McCleod, 2001). Next, the researcher remained open-minded and committed to focusing on the data by revising the interview questions, if necessary, based on the initial interviews with the participants. The researcher also asked for their feedback on themes that were identified during the preliminary coding phases. Finally, the researcher discontinued mindfulness practice in the community during the course of the study in order to prevent contaminating the pool of prospective participants through interactions with them. Refraining from mindfulness practice also allowed for objectivity and helped the researcher to remain rooted in the data during the analysis phase of the study. By undertaking these measures, the researcher sought to maintain integrity in the research process.
Chapter Four: Results

To develop a preliminary understanding of the adverse effects of mindfulness meditation, participants’ experiences were divided into three core themes that captured the comprehensive nature of their experiences: Individual and Sociocultural Contexts, Adverse Effects, and Methods of Coping. The first core theme, Individual and Sociocultural Contexts, refers to the contexts in which adverse effects were experienced. The second core theme, Adverse Effects, catalogues the variety of physical and psychological effects of mindfulness meditation. Finally, the third core theme, Methods of Coping, details the ways in which participants attempted to manage their adverse effects. Each of the participants’ stories related to these core themes, often with differing degrees of emphasis and intensity (e.g., some participants predominantly experienced uncomfortable psychological effects; others did not feel they needed to cope with the experience and simply refrained from practicing). The three core themes are each comprised of additional main themes that were experienced by most if not all of the participants. The main themes were, in turn, subcategorized into lower order, sub-themes that related to the unique aspects of participants’ experiences. These sub-themes were experienced by some of the participants and illustrate individual nuances in their experience of mindfulness meditative practices.

Individual and Sociocultural Context

Participants’ adverse experiences during mindfulness meditation were often situated within personal and cultural contexts. These contexts influenced the type of issues participants experienced, the intensity of their experiences, and their process of healing from these adverse effects. Participants were asked to reflect on influential elements in their personal histories and the broader contexts in which they approached and practiced meditation. All participants reported that there were contextual factors that contributed to their experience of
adverse effects from mindfulness meditation. This core theme is comprised of the following four main themes: Personal History and Personality Factors, Motivation and Expectations, Transitional Period, and Cultural Tensions.

**Personal History and Personality Factors**

Most participants reported that there were elements in their personal histories and personalities that influenced the experiences they had in mindfulness meditation. Often, participants’ adverse experiences were related to previous ways of thinking and processing. Nevertheless, their experiences during and after mindfulness meditation were often more intense and had a larger impact on their lives. One participant, Ira, reported a past history of anxiety, but that it was so mild he had never taken it seriously. When Ira started his practice of mindfulness meditation, the most salient adverse effect he experienced were regular panic attacks. While Ira had bouts of anxiety previously, he had never experienced panic before. Ira discussed some of his personal psychological history:

Another thing that didn't really help was that I never really had anxiety in my life before, not in a regular way. I guess I wasn't conscious of having anxiety, I was probably somewhat anxious, like everybody is, right?...I didn't have like a good understanding of anxiety and how it worked. I didn't, like I said, have a logical knowledge of how panic works, for example. And, so that didn't help...I guess in the past I've had experiences of panic. But it had always just been sort of like, situational thing, so I could attribute it to something outside, then the situation passes and then it's over and didn't bother me anymore. Whereas this, because it was something internally generated, I didn't know how to deal with it.
Ira acknowledged a lack of self-awareness about his own personal psychology, which prevented him from recognizing symptoms of panic. While he attributed his previous experiences with anxiety to situational factors, he failed to attribute his symptoms of panic to his mindfulness practice. Ira reported that this was due to the pervasive notion that mindfulness meditation is a positive and beneficial practice. He also described other elements of his personality that led him to continue meditating, despite experiencing a host of adverse effects:

I mean, not consciously anyways. I don't think I knew. What I was more drawn to was getting into a state of perfect bliss and relaxation, clarity…I think it's inevitable that people would develop attachment to it, not necessarily consciously but unconsciously, because they're blissful states. Like, you would develop attachment to anything that's pleasurable… None of my teachers taught me this, like, this is what you should focus on…like practice looking at attachments, because that might be what's causing this tendency to keep going into these altered states of consciousness.

Ira described having possible unconscious biases that led him to create attachments to his samatha meditation practice. He also noted his ability to remain focused for long periods of time. He reported that it would have helped if his personality propensities had been recognized by the teachers who were guiding him. He believes that proper guidance would have helped him shift his approach to practicing meditation rather than continuing with a practice that was causing him difficulties. Frank also identified elements in his personality that influenced how he pursued mindfulness meditation:

Well, I was really one-pointed. I'm really German. I'm really anal-retentive. I'm really like—just do it! ... I said I wanted to get more hardcore with this. I wanted to get a little more serious.
Frank attributes some of the intensity of his experiences to his personality, which he described as being particularly serious and focused. Frank acknowledged that the mindset he brought to his meditation practice was not well-balanced, with an extreme focus on attaining enlightenment at the expense of other aspects of his being and functioning. Emily also felt that there were aspects of her personality that influenced the way she approached her meditation practice:

[It] tapped into my perfectionist aspects. Like, the whole you need to try hard, don't waste your time—I think I took that way more seriously than I should've. So, every minute that we were supposed to be meditating, I was meditating; whereas, a lot of people would sleep in for an hour or whatever. So I think, yeah, that was definitely something that was a problem for me.

Emily described herself as a perfectionist and noticed that she practiced meditation in a similarly rigid manner. Like Frank, she was determined to practice intensely and believed that the negative experiences she had naturally followed from this style of practicing. Alia also realized that she had experiences in her past that lingered under the surface.

I had some therapy in undergrad for my childhood stuff and that was like, check, done, let's move on. And, in retrospect it was pretty useless… After the retreat I was like, I was like okay, this is my childhood garbage. There was a lot of stuff towards my mom… I don't know, I guess my father was abusive? ... I got that. I was like, you gotta deal with this at some point.

Alia reported that, in retrospect, there were childhood traumas that quickly emerged once she started practicing mindfulness. Following her sitting practice, Alia reported that these past traumas intensified when she re-experienced them. She had erroneously believed that she had
dealt with these issues, however, the meditation made her realize that there was still much work to be done. Ultimately, all participants found that aspects of their personality and personal history manifested in their meditation practice. Some had previous mental health issues or childhood traumas that quickly surfaced and intensified through meditation. Other participants noticed that their personality style led them to be zealous and inflexible when practicing mindfulness.

**Motivation and Expectations**

All participants described having personal motivations for undertaking mindfulness meditation. Most participants hoped that mindfulness would provide them with serenity and clarity in their lives. Some participants found that the spiritual nature of mindfulness appealed to them, and they were motivated by a desire to understand the true nature of reality. Participants’ experiences were often deeper, more complex, and more intense than they had previously expected. For instance, Rayna described being naive about the nature of mindfulness:

So yeah, I went there initially to gain like, clarity or like to even, not necessarily run away but to remove myself from a situation and then have a different perspective on things, with that sort of intent in mind… I think originally, I thought that mindfulness meditation would be very Zen, very peaceful. Almost like, looking at a blank canvas. If I had to visualize it would be like clear, white… I though it would be like a restart button. I thought I'd like press a button, I'd meditate and it would be like woosh, everything's gone now! ... But then afterwards I realized that definitely wasn't it.

Rayna had hoped mindfulness would clear her mind and help her achieve a new level of understanding about herself and her relationships. She had just ended a long-term relationship
and intended to practice *vipassana* to process the experience. She quickly realized that it was not the panacea she had hoped for. Jean-Luc was in a period of identity formation and was motivated by a desire to differentiate himself.

My decision to join was just funny when I think about it… We were all going through this sort of process of socialization, process of trying to find our unique voice amongst the masses… To me, it was just—being Buddhist was cool, so I thought I would try it… And, it was in that process where I sort of began to uncover the very forces that caused me to want to differentiate myself… I became very aware of the vanity… It was something I could wear on my lapel. I could go to school and be like, oh, I'm the guy that's studying Buddhism, I'm the guy that's meditating… Some guys might go and find their car—like, I'm a Mazda guy. For me, though, it was vipassana. Vipassana meditation is just something I happened upon.

Like most participants, Jean-Luc claimed to know little about mindfulness meditation and the impact it would have on his life. He chose the practice because Buddhism was popular among his music idols. He described how mindfulness meditation provided him with an identity. Another participant, Alia, had been swayed by her partner who espoused the positive benefits of mindfulness practice:

So I never meditated before. I got married and my partner was really into meditation. So we got married and he's like, ‘Hey you wanna go on a meditation retreat,’ and I said sure. And, the first day of sitting, the actual practice was natural to me, I felt like I was able to get concentration. The actual practice was really pleasant. And then, that first night something very intense happened.
Like several other participants, Alia described having no understanding of Buddhism or mindfulness prior to her practice. She attended a retreat because her partner was an avid *vipassana* practitioner and spoke highly of the practice. Due to this misperception, she felt unprepared for what was triggered by the practice. Frank was motivated by spiritual goals and a desire to understand the true nature of the self. Frank had been a lifelong meditator and yet was unable to previously achieve this goal, so he sought out *vipassana* meditation:

> I had spent so long in the spiritual circuit… I’ve been practicing too long, I've invested too much time in this… I’m gonna do it, I'm just gonna motor through this—I’m going to intensely practice… Extreme, yeah—I wanted to be enlightened… there’s a promise of awakening, right? ... When we go into all these practices there's this child-like projection that it's such a great, beautiful thing… There’s this fascination with emptiness. I didn't know I was afflicted by it, right? I don't know why I was so excited... Well it's ‘cause it's painted romantically, you know. The presentation is ‘no self, no problem’… We all want to feel better! Even the people that want enlightenment, they want it because they want to feel better.

Frank was motivated by a desire to experience “emptiness” but found the actual experience to be far more disorienting than he had expected. Despite his years of experience and understanding of Buddhism, he was unprepared for what he experienced. Frank questioned why he did not receive the “pot of gold that [he] was promised” and felt that benefits of meditation, emptiness, and enlightenment had been oversold. He had not considered the implications of living with these experiences in the West. Overall, most participants were motivated by an overarching curiosity and had expected mindfulness to be a positive experience. Many were surprised when their experiences differed from their expectations. They noticed a discrepan-
cy between their naive expectations of mindfulness practice (i.e., that it is a direct route to clarity, peace, enlightenment) and their experience of being confronted with difficult aspects of themselves and the world.

**Transitional Period**

All of the participants reported that they were in a transitional period in their lives when they decided to begin practicing mindfulness meditation. This transitional period was characterized by an increased amount of change and stress. Most participants described feeling uneasy about the level of uncertainty in their lives. Due to their life circumstances, all participants approached mindfulness with the intention of calming their minds, relaxing their bodies, and achieving clarity in their situations.

Winnie began attending a weekly drop-in mindfulness meditation class at a local university campus at the behest of her therapist. Her therapist believed that it would help Winnie adjust to recent changes in her life:

> I started experiencing these negative things when things were getting worse in my life. Around that time, I had to see the counsellor a lot more. I had issues with transitioning to university and the associated independence issues. University just overwhelmed me. So, it was around that time that things started getting out of hand. So, that's when the counsellors told me to try meditation.

Winnie described feeling overwhelmed by the pressures of university and began experiencing mental health issues at that time. She had heard from friends and her therapist that mindfulness would help her cope with the difficulties she was experiencing. Like Winnie, Jean-Luc was also transitioning to university and described his shifting sense of self during that time:
I think it sort of had to do with the fact that I was sort of nervous about university. A lot was going on socially, familially—there was just a lot going on in many different areas of my life at the same time.

Jean-Luc described feeling nervous about entering university and brought these feelings into his mindfulness practice. In addition to worrying about the future, he was dealing with family issues, like his brother’s struggles with a debilitating anxiety disorder as well as changes in his social group. Belle also sought out mindfulness during a period when she was experiencing changes in her life:

I was living in a pretty tough roommate situation… I moved back home a couple months prior, so I was already in an environment that was like really, um, sort of emotionally fraught… I felt pretty tense… So when I started meditating, it was sort of like, things were already really wound up. It just came along at a time when I was open to finding out what the hell was happening to me… I guess it was a transition period… I would say my life was full of intense emotional extremes and a lack of direction… I felt a little cut-off because I moved out of the neighbourhood where all my friends were living.

Belle’s transition period was characterized by heightened emotionality due to changes in her life. She had just left a difficult living situation and was disappointed that she had to move back home with her parents. She also terminated a long-term relationship and was struggling with aspects of her identity. She undertook mindfulness meditation because she felt that she needed to understand all the changes that were occurring in her life and how they were affecting her. However, when she began meditating and was inundated with adverse effects
and new insights, she found that she was separated from her support system. Emily also underwent a period of considerable change prior to engaging in mindfulness:

"Yeah, it was right before I was moving in with my partner and her kid. That was really stressful, I had never lived with a partner before… We were definitely having stresses around the whole moving in process, so I think there was a lot of additional stress and worry about whether it would work, whether it was a good choice… Which then became really good fodder for the anxiety cycle once that started. Lots of panic about: is this moving me in a direction that's going to move me further way. Am I going to come back and not want to move in? Am I going to come back and wanna run off to a monastery… There was a lot of change. I was about to go through a big transition.

Like Belle, Emily commented on the “additional stress” and worries that she was experiencing due to the changes in her life. Overall, all participants described undergoing a period of transition in their lives relating to their living situations, relationships, and identity. This transition period was characterized by a sense of unease and confusion that participants felt were easily triggered by their mindfulness meditation practice.

**Cultural Tensions**

Many participants described their mindfulness meditation practice as being influenced by sociocultural factors. These participants experienced difficulties with practicing mindfulness in a Western context due to a tension between their beliefs and those associated with mindfulness. As individuals who had been socialized in North America, they felt that the mindfulness retreats they attended were not suited to their cultural needs. They also felt that their meditation teachers were not appropriately trained to address their particular issues.
Several participants even questioned the value of achieving the goals of mindfulness meditation when living in a Western society. Ira described the cultural tensions he experienced:

We're not looking at the fact that the origins of this practice are very different from what the aims of Western psychology, and Western notion of wellness is… I had a sense that Buddhism was about seeing somehow that there was no self… But I disagreed with that! I didn't want to see that there was no self. I believed there is a self, and I still believe there is a self… The Buddhist concept of no-self… It’s the lack of a self that's utterly impermanent, unchanging, and perfect. Which, I don't think is what most Westerners are really looking for when they're looking for self-discovery, or having a healthy sense of self, or an authentic self.

Ira discussed being ignorant about the philosophical roots of the mindfulness practice he engaged in. He later learned that the West does not share similar notions of selfhood as Buddhist cultures. Ira reported that he rejected the Buddhist notion of the self and it led to feelings of unease when he meditated. He believed that other Westerners may also experience this tension because they are looking to develop their self through a practice that was meant to deconstruct it. Ira also commented on the need for mindfulness retreats to be modified for practitioners in the West. He suggested that the original way of practicing mindfulness might be inappropriate for achieving Western goals and values:

Most people who teach, even Buddhist teachers in North America who teach Buddhism, don't teach radical collectivism. They still somehow think that you can do these practices, you can have these realizations and insights, but hold down a job and have interests and basically be a Western individual… In Asia, where we see attaining these states is in the context of a monastery, where their individual identity… is
really attenuated. Like, they're a monk, they wear clothes the same as everybody else, they have a ritualized form of life, but is relatively simple, their needs are taken care of... Which is not the case in the West. And, if you want to live in the West, you have to maintain that level of individuality.

Ira described how there are protective factors embedded in Asian society, which may prevent mindfulness from being severely disruptive. He discussed how mindfulness was originally practiced in a cultural setting where collectivism reigned and the loss of the self that can occur through mindfulness had less implications. Frank’s experience was also similar to that of Ira. Frank also felt that his understanding of key mindfulness concepts was distorted through his Western cultural lens:

The very world you live in falls apart when you see clearly, the Buddhist truth of emptiness... In an individualistic, ego-driven, power for yourself, get-what-you-can world, you start talking about emptiness and space... Is that appropriate? The ego is so necessary to function here... It’s one piece out of many that's glorified. Just like in our consumer society, having a lot of money, a secure job, the title, we value that and that really gives us the foundation for this [type of thinking]. You know, Chogyam Trungpa coined the phrase “spiritual materialism.” We want the goodies—it's no different than wanting to feel powerful, secure, somebody.

Frank described losing his sense of self through meditation and realizing how necessary it was to function in Western society. Due to being socialized in North America, he felt that he approached mindfulness with a mindset that viewed spirituality as another attainment. Furthermore, he noticed how the goals of mindfulness are, at times, antithetical to Western cul-
tural values. Frank also discussed other aspects that are missing from mindfulness in the West:

You need to work on the spiritual dimension, you need to work on the physical dimension, you need to work in the shadow dimension, you need to work on the interpersonal dimension, the intellectual dimension, whatever dimension, these are all facets of being a human being. But this is where [mindfulness] goes wrong… I was told this over and over, that the spiritual line of development trumps all the other lines of development. So if you go for enlightenment, then it will ripple down.

Frank described his encounters with spiritual leaders in North America who overemphasize the spiritual line of development while failing to acknowledge the importance of psychological awareness. Consequently, he believes that there is a pervasive misperception among individuals in the mindfulness meditation community that mindfulness is the only tool one needs to achieve wellness. Emily also experienced cultural difficulties when she became anxious at a retreat:

So, I went to her and that was the first fear that came up for me. But, [the teacher] didn't really see that as something to worry about. She even said, ‘I don't understand why this is a big deal, for me it's not really a big deal’… Like, I was saying, culturally for me and my relationship, that's actually a huge deal that would be potentially relationship killing. We couldn't communicate on what I needed support around and so I didn't get what I needed… [she] had less direct experience of the cultural reactions that could potentially happen in the North American context.

Emily described being unable to receive adequate support around particular fears that arose during her meditation practice. Her teacher had just arrived from Vietnam and was not ac-
quainted with the reactions that can typically emerge for Western practitioners of mindfulness. Emily was very concerned about loss of desire because she and her partner had been struggling with intimacy. Emily felt that her teacher’s response and failure to understand exacerbated her fears. Overall, several participants reported that there were cultural tensions present in their practice of mindfulness that may have contributed to their adverse experiences. Some participants challenged the appropriateness of mindfulness for Western practitioners who had been raised with different cultural values. Furthermore, participants felt that they received inadequate support due to these differing values.

In conclusion, there were individual and sociocultural contexts that participants felt had influenced the nature and intensity of the effects they experienced through mindfulness meditation. All participants reported that elements of their personality and personal history impacted the manner in which they practiced and the difficulties that arose. Some had a previous history of mental illness or trauma, while others identified personality traits that pushed them to practice in a certain manner. Several participants also reported that they lacked an awareness of their own personal psychology, but they believed that meditation intensified their existing psychological tendencies. They also reported that they brought specific intentions and expectations into their mindfulness practice and were unprepared when they began experiencing adverse effects. Many participants also described being in a transition period in their lives where they were experiencing considerable change and stress due to feeling unsure about their identity, relationships, job, and direction in life. Finally, several experienced practitioners commented on the cultural tensions that were present in their mindfulness practice. For these participants, it became evident that the goals of mindfulness practice, such as emp-
tiness and enlightenment, were causing significant disruptions. Several participants were also unable to receive adequate support due to differences in cultural values and expectations.

**Adverse Effects**

Following their engagement in mindfulness meditative practices, all participants described experiencing a diverse set of adverse effects. Participants were asked to describe the effects of mindfulness on their body and mind, as well as the impact these effects had on their lives. The adverse effects participants experienced ranged in type and intensity, with different participants emphasizing different aspects of their experience. The extent of these disruptions also varied, with some able to continue practicing meditation, while others were unable to continue their lives normally. This core theme is comprised of two main themes: Physical Effects and Psychological Effects.

**Physical Effects**

In order to capture the full range of effects that individuals might experience during mindfulness practice, participants were asked to describe the impact mindfulness had on their body. All participants identified difficult physical effects resulting from their meditation that varied in intensity, ranging from mildly tolerable to profoundly disruptive. This main theme is comprised of two sub-themes: Sensory Effects and Physiological Changes.

**Sensory effects**

Most participants reported experiencing heightened sensory sensitivity, which they perceived as distressing. Participants’ experiences of external bodily sensations differed by intensity and type with many reporting heightened sensitivity mainly within the auditory and visual domains. Rayna, for instance, experienced increased auditory sensitivity:

> It was like having your physical senses tuned up… A lot of it when I was just in free mode, paying attention to what was coming up. I think I was just very aware, espe-
cially after remembering that bad memory from my childhood, I was very aware auditory-wise… You could hear like a pin drop. Even somebody moving, or even yourself adjusting, breathing or like swallowing, things like that feel like you have an amplifier in your ear. I could just feel myself getting tense.

Rayna noticed that her hearing was heightened after she relived a difficult memory from her childhood. She found that this increased sensitivity to sound made her tense and uncomfortable. Frank also reported increased auditory sensitivity, which he found to be profoundly disorienting:

I just spent a lot of time in my apartment. I was just too hypersensitive. Even people's voices at times sounded like rasps and screeches, like nails on a chalkboard…

Being so sensitive, like, a car would drive by and it would be like a jet plane flew in front of me.

He also felt limited socially because he found that having a conversation with people was too difficult due to his increased auditory sensitivity. Emily also experienced overwhelming auditory effects:

I felt like, total and complete overload… I was so overwhelmed by everything… I was aware of everything going on… Like I could hear the buzzing of cellphone towers… Like, I came back, and I was so hypersensitive to things that I could pick up rocks and feel vibrations in a way that I never believed was actually a real thing. I was never an energy person. I came back and like I could feel energy in things…

Like, I was just like spinning off. I can't feel that anymore… It was so intense.

Emily expressed several times how her sensory system felt overloaded after she returned from a mindfulness retreat. She reported that she would have “lost her job” if she had to go
back to work immediately following the retreat. Emily also commented on the interpersonal consequences of this increased auditory sensitivity:

I closed myself off from everything. I had very limited social interaction. It was all one on one. I could not handle parties. I couldn't handle loud environments. I basically just surrounded myself with people who I could talk with about this or just sit in silence. I spent a lot of time on the couch staring at the tree out the window watching the leaves move.

Emily described how she became unable to engage in social activities that were previously enjoyable to her. She found loud environments like parties to be too overstimulating and spent a few months staying at home to limit her exposure to auditory stimulation. Ira also experienced strong visual “sensory distortions”:

Well at that point, I had probably the strongest sensory distortion that I had, where I was looking down at my chest and seeing it sort of disappear in the visual field. And not being able to feel my chest move as I breathed. So those were extremely terrifying experiences. I just didn't know how far it would go. Like, this was all from outer space—I had no context or reference point to understand any of this.

Ira described how he noticed that his chest disappeared while he was breathing and did not have the training or support to understand what was happening to him. Several participants noticed an increased sensitivity to the outside world and in their relationships to others. These sensory effects fell in the auditory and visual domains. Participants who reported an increase in their sensory sensitivity found that they were disruptive and hindered their engagement in previously enjoyable activities.

**Physiological responses**
Almost all participants experienced internal bodily sensations resulting from their engagement in mindfulness meditation. These physiological changes caused a level of discomfort that ranged in severity, from strange uncomfortable sensations to frightening and disorienting effects. For Winnie, physiological changes became noticeable while she was engaged in her meditation practice:

I was feeling overwhelmed before because…you feel these associated physiological symptoms…like the trembling and cold sweats and heart pounding too. Then, it becomes a cycle. You feel that your problems are very bad, and you can't snap out of it. Like, you take deep breaths, and you do more deep breaths than necessary, then you start hyperventilating. That has happened. I started freaking out a bit.

Winnie described experiencing physiological changes such as body trembling, cold sweats, and a racing heartbeat. She also noticed that deep breathing triggered hyperventilation. Winnie emphasized that while the physical effects alone were uncomfortable, she found that it triggered psychological worries, which fuelled a negative feedback cycle. Emily also noticed a variety of physiological changes occurring within her body during her meditation practice:

Pain that would then turn into heat, that then would dissolve and turn into tingles, not really tingles, more like feeling energy. It almost felt like—you know those rain sticks? I felt like I was one of those. Like, it felt like there were little beads falling up and down my body. To feeling like there was bugs under my skin… I was feeling like almost like my shoulder was clenching in on itself to the point where I could barely move my head. And then that would release and I would have this intense emotional release… Then, half an hour later there'd be like chattering and movement and ‘rushy-ness’ and it was just this constant change.
Emily described a chaotic scene occurring within her body, which included pain, tingling sensations, the feeling of “bugs” beneath her skin, and extreme physical tension. Emily found these sensations to be very uncomfortable and, like Winnie, also noticed that they triggered psychologically-related concerns. Ira also experienced physical sensations that he felt led to symptoms of panic:

Lots of strange types of sensations in the body. Freezing cold, hot—you know, major changes in temperature, mostly in my core. Involuntary muscle movements. It was like a feedback loop… I was already in a panicked, fearful state, which was just causing more fear and more panic and so on…I took a really deep breath and I stood up at that point, and I felt something drop in the pit of my stomach, in my diaphragm area, almost like a little spasm..then it was more like almost like a sudden surge, like through the roof. A sudden surge of—I don't know if energy is the right word—just like a feeling of suddenly floating, kind of flying up through the top of my head almost.

Like Emily, Ira described a heterogenous mix of physical sensations, including shifts in body temperature, involuntary muscle movements, and surges of energy. Ira offered a more nuanced picture of the effects he experienced; as he later commented, it was not an “unambiguously negative experience” because it was intermixed with positive feelings like “peace.” However, he noted that because of the significant intensity and rapidity in the sensations, he found the experience to be jarring.

Overall, participants noticed changes in their auditory, physical, and visual experience. These participants found that the sound from conversations and environmental noise, like traffic, to be intense and distracting. Several found that there were interpersonal conse-
quences because they were unable to interact with their partners and friends without feeling overwhelmed by sensory stimulation. Many participants also experienced a range of physiological changes due to their mindfulness meditation practice, often following participation in a retreat. Some participants noticed physiological effects, such as rapid heartbeat, sweating, energy shifts, and temperature changes, which they found to be distressing. Participants who had these experiences reported that the physical sensations and psychological impacts were often linked, with each potentiating the other. Several participants reported that the physical sensations they experienced, such as rapid heart rate, difficulty breathing, and sweating, were related to panic.

**Psychological Effects**

Participants also noticed the emergence of psychological material due to their mindfulness meditation practice. Participants were asked to reflect on the impact mindfulness had on their mind. All participants reported psychological changes that varied in intensity. Several participants experienced more acute psychological effects that proved to be unmanageable and negatively impacted their lives for a significant period of time. This main theme is comprised of three sub-themes: Panic Attacks, Derepression of Emotions and Memories, and Altered Perception of the Self and World.

**Panic attacks**

Several participants reported that they experienced panic attacks during and following their mindfulness practice. The feeling of panic was generally characterized as an intense fear or feeling of dread and was also accompanied by associated physiological symptoms (e.g., rapid heartbeat, difficulty breathing, sweating). Furthermore, participants who experienced
panic often did not know what was happening to them and consequently found the experiencing to be overwhelmingly frightening. Jean-Luc described his experience with panic:

I was experiencing, essentially, a panic attack… I was sitting in the group, and I just began to experience all the tell-tale signs of a panic attack: my heart started racing, I was having incredible difficulties breathing. I tried to stand up, but when I stood up I started to feel really dizzy. Basically, I thought I was going to die… I just felt this surge of panic and anxiety… It was actually an immense sense of dizziness. Like feeling, even though I was sitting on a firm cushion, just incredible dizziness—I thought I was going to faint. It was just complete and utter dread. Like, the first time was just really like—I'm going to die.

He experienced this while meditating at a community-based centre. The panic attack included psychological symptoms, such as an intense fear and the feeling that he was going to die, along with the concomitant physical symptoms like difficulty breathing and rapid heartbeat. Jean-Luc experienced panic attacks three more times during his first year of practice. Ira also experienced recurring panic attacks following his mindfulness practice at a retreat. Ira related his experience:

Also, at that point, I couldn't feel my breathing in a normal way… the breath itself kind of became empty, or went into a dissolution experience. And so, I was experiencing not as a solid thing, not as something that was present, but I was experiencing its absence. My mind interpreted that as like—I’m going to die of not breathing… I was looking for the breath and it wasn't there. So I definitely panicked… And it would also start establishing a psychological pattern that ended up being very hard to break. Which was a terror around bedtime. And that's really what led in to the panic
disorder was, every night for the next year and a half I was having panic attacks around bedtime.

Ira described it as “painful to recall” how his mindfulness practice led to nightly panic attacks for over a year after his retreat. By paying attention to the absence of his breath, Ira claimed he had a visceral experience of the Buddhist concept of emptiness, which became terrifying when it triggered a panic attack. Emily also experienced panic attacks during her meditation practice at a retreat:

More or less had on-again, off-again panic attacks for the last three days… I started talking, and I relaxed, sort of feeling like it was over and then that night I had the most intense sensations that I had the entire time. I felt like I was completely dissolving. I wasn't sure if I was going crazy or dying or what was going on. I could not stop going to the bathroom. It was like everything I ate basically just went right through me. Like my whole body was basically shutting down. I spent that entire night thinking I was going totally crazy. The next day after it ended, I was pretty much completely catatonic. I had no idea what was going on.

Like Ira, Emily also described how she felt like she was “completely dissolving” when she experienced regular panic attacks during the end of her retreat. On her final day at the retreat, she was “catatonic” and the teachers began to become concerned for her. Several participants experienced psychological symptoms of a panic attack both during and after their mindfulness meditation practice. These symptoms included anxiety and fear, feeling like they were dying, and feelings of “dissolution.”
Derepression of emotions and memories

All participants reported that there was an emergence of emotions and memories that had been triggered by their mindfulness practice. The derepression of psychological material generally occurred quickly and suddenly and left participants reportedly feeling bewildered, “shocked”, and “uncomfortable.” Some were able to adjust and integrate their new awareness, but others found their lives radically shifted, unable to return to equilibrium. Several different types of emotional material emerged including fear; “hallucinations and visions”; childhood traumas and other negative memories; and sadness and anxiety.

**Fear.** Many participants reported feeling an overwhelming sense of fear during their mindfulness practice. This fear often emerged suddenly, appearing unrelated to the content of participants’ mindfulness practice. Ira discussed the terror he felt:

I had a few incidents in that first year where I was, where I felt afraid during the meditation. Like suddenly, I'd be going along, I'd become very concentrated on the breath, and then I was suddenly at this place of terror. You know, just like great fear would suddenly come up… I would just kind of try to meditate through it and sometimes I had to stop and it would be a few hours till the fear would kind of pass by… So I was trying to meditate through it. And I just kept experiencing more terror, more fear.

Ira described suddenly feeling fear when he would concentrate on his breath. When he tried to meditate to deal with the fear, he noticed that it would exacerbate it, and he had to refrain from meditating further. Emily also felt intense terror and fear during her meditation.

So definitely anxiety was a huge thing that was coming up. It was like this body-shaking, uncontrollable terror. That's what it felt like in the context of meditation. The normal anxiety I would feel was ramped up like 50-fold. And, it was latching onto
anything it could latch on to. It would like become, ‘This meditation is going to kill me.’ It would generalize. Originally, it came up around some specific things but it quickly began to attach itself to the meditation because that was something new and unexplainable. And I didn't understand what was going on and it was scary.

Emily described how meditation became a trigger for her anxiety, and she genuinely believed the “meditation [was] going to kill [her]” because it was “new and unexplainable.” Frank experienced an immense sense of fear when a shift in his experience of himself occurred following his meditation:

So, I remember thinking, I needed a strong cup of coffee…thinking I could kind of snap out of it. But, I didn't snap out of it. And the fear element grew because it was not under my control…when I realized that this was not just some kind of wispy cool thing. It was permanent. Or I thought it was permanent… I came in touch with the primitive animal fear in my body, a level of paranoia and fear that I could only describe as infinite. It's like I penetrated my amygdala. I penetrated the animal… I had never felt that intensity of fear in my life. I just held the course… I literally felt like my molecules in my skin were being ripped from my bones out of the intensity of the fear.

Frank described feeling an intense primal fear when he began to lose control over his experience following his mindfulness meditation practice. He had originally believed he would “snap out of it” but the effects lingered for years to come. Alia also noticed the emergence of fear and terror:

I felt a lot of fear, like a lot of fear. I had a lot of hallucinations and visions…Basically fear was the name of the game… it was like Alice in Wonderland
meets Clockwork Orange. It was very Bruce Simmons-sexually charged—you know, nothing that I think I would've come up with on my own. So that was a lot of confusion for most of the retreat…really gruesome visions. Violent, sexual images… On one of the retreats…there were monsters, like actual monsters really trying to kill me. Like, I could see them but I'd know they weren't real. But it was terrifying… So it was basically like all these things that scared me shitless when I was a child… It definitely brought out stuff I was suppressing.

Alia described that her fear had manifested as “monsters,” which emerged through the “visions” and “hallucinations” she experienced following her meditation practice at a retreat. She acknowledged that many of these images were related to past events and experiences in her childhood, which she was unable to comprehend at the time of their re-emergence. Overall, many participants experienced intense fear and terror. Most participants’ found that this fear emerged suddenly, appearing unrelated to any mental contents. They found that meditation continued to trigger this fear for months or years after the commencement of their meditation practice. Other participants noticed that their fear was related to imagery and contents that were emerging from their unconscious.

**Traumatic experiences and negative memories.** Many participants also noticed the emergence of negative memories and trauma. Often participants re-experienced the traumatic event in the present while they were meditating. Similar to Alia, Rayna also relived a traumatic childhood experience, which she found to be jarring and severely uncomfortable:

I had like relived that experience. It was a very traumatizing experience, and it was very vivid, as if I could feel it and hear it and remember how I felt during that moment—like, scared as shit… I just remember it being so vivid, even talking about it
now, I can feel myself being apprehensive, like that tension. I was crying. I felt my like body just go into fetal position, curling in on myself just to protect myself.

Rayna discussed vividly reliving a painful childhood memory while she was meditating. This led her to begin crying and curling up into a fetal position during her meditation. Frank also noticed that childhood traumas arose during his meditation:

Well, a lot of childhood traumas surfaced. A lot of this terrified, abandoned, crazy stuff. There was paranoia. There was this idea that life was not safe. And I think that really had to do with a lot of stuff that I knew happened in my childhood that I hadn't really fully, got the extent of… many people have an initial experience of the transpersonal, the openness, the space, is really unpleasant, because it has very negative associations with it. It's associated with abandonment. When you lose yourself, it's a deep loss. It's kind of even related to loss of mother or loss of ground.

Frank described how he associated the feeling of “openness” to childhood events related to abandonment. He described feeling terrified and paranoid when this psychological material emerged during his meditation. Belle also noticed an upwelling of emotional content that she had spent many years “trying to suppress.” Belle reflected:

A lot of negative memories from my past just sort of surfaced, and I started to experience them… I became really aware of the emotions in my body…it felt like so many things from my past were happening simultaneously, like, all these things were just surfacing and I had no control over it in a way…just feeling the release of a lot of negative emotions and feeling really sad and crying…definitely overwhelming… I felt like I was having a internal crisis…it was like a flood of heat rushing…rising right to my face and like, tears… I thought I was losing my mind, when all this was
happening. I was really just losing my grip and feeling so emotional, and so edgy, and so raw.

Belle reported that when difficult memories emerged, she became overwhelmed with sadness. She commented on how being “flooded” with memories and emotions made her feel as if she lacked control over what she was experiencing. Overall, many participants noticed that negative memories and traumas arose during their meditation practice. Some participants were also surprised when they began to re-experience their traumas during their mindfulness practice. These negative memories were often associated with emotions such as fear, feelings of abandonment, sadness, anxiety, and characterized by a feeling of lack of control.

**Sadness and anxiety.** Many participants experienced feelings of sadness and anxiety during and following their mindfulness practice. Some found that these feelings were tied to specific experiences in their past, but a few felt that the emergence of these feelings was unrelated to any specific trigger. Others, like Winnie, noticed an increased intensity in their feelings of anxiousness and sadness:

> But, I felt more tired after. I still felt nervous. I would get more depressed than before or I'd cry. So I definitely didn't feel refreshed - I felt more tired and more weary… On my mind and brain, it really tires me out. I feel as if something very heavy has come on to me after meditation … It gets worse in that I feel more nervous coming out of the mindfulness practice. That feeling lasts for a couple hours after. It makes me feel even worse about myself. After my meditation, sometimes I cry. Sometimes even during the meditation. I cry because I feel overwhelmed with my problems.

Winnie reported that she sometimes cries during and after her meditation because she feels more depressed and anxious following her practice. While this emotional experience was
common for Winnie, she felt that the meditation made it worse. Ira also became overcome with sadness during his meditation:

I was just consumed with sadness. That was the most powerful sadness I think I probably ever experienced… I was just wrecked. I was just sobbing for hours. It was just a crazy experience of an upwelling. And again, it wasn't about anything in particular. It was just like sadness. Later on, as I was processing this experience, and to some extent I was able to ground and associate some of the emotions that had come up with various psychological stuff. At that time, it was all so raw and I didn't experience it as being connected to any concrete images or memories.

Ira described how he felt an overwhelming sadness, which he did not understand at the time but led him to cry during his practice. Later, through a concerted effort to process the experience, he was able to integrate it and understand its origins. All participants reported that psychological and emotional material arose during their meditation practice. Several participants described feelings of terror or increased anxiety while others noticed an overwhelming sadness or grief. One participant reported experiencing her fear manifest as graphic “visions” and “hallucinations” following her mindfulness practice. Some participants described the emergence of vivid negative memories and childhood traumas.

**Altered perception of the self and world**

All participants reported changes to their sense of self and perception of the world following their engagement in mindfulness meditation. For most participants, this radical shift in their sense of self was initially disruptive to their lives. They also noticed a change in their perception of the world that often made it difficult for them to live their lives normally.
Frank reported that his *vipassana* practice was successful because he was able to experience the Buddhist concept of ‘not-self’ (i.e., the empty self):

The *vipassana* meditation was successful—it erased a lot of things. Unfortunately some previous things got erased: my love of art, my sexual desires, my sense of meaning, my maps of meaning… One of the things I lost is all my ambition to be somebody. Because, moment to moment experience is too profoundly overwhelming… I'm way more insecure than I've ever been in my life and that's okay.

Frank described the loss of his interests and desires as well as a newfound feeling of insecurity. He claimed that because he found everyday life to be overwhelming, his ambitions diminished. He believed that he wanted to experience the Buddhist concept of “emptiness” but underestimated the consequences of it:

If you wanna disassemble yourself, they're very good. And of course, the goal is to disassemble your ego… But, I don't think anybody knows what it will be like to deconstruct yourself…we spend our early years building a functional ego and how many meditation teachers are aware of what goes into building an ego?.. they don't think that if you deconstruct the subject that the whole world of object relations will fall apart. The very world you live in falls apart when you see clearly, the Buddhist truth of emptiness… the organizing principles of one's life are radically shifted…what could happen when you have a shift of identity and a shift in perception of who you are?

Frank described feeling a “profound shift in [his] identity” when he implemented the self-deconstructive practices of *vipassana*. He noticed that not only did his sense of self change, but its relation to the wider world also radically shifted. Frank believes that many people are
unaware of how disruptive these deconstructive practices can be, despite it being a goal of vipassana practice. He also described being told by his meditation teacher that he needed “more meditation,” but when he attempted it, he began to “free fall deeper than he could bear” which he “wasn’t ready for.” Frank also described losing his “maps of meaning”:

I knew something was really weird... The conceptual world got dismantled. Like, I'd be walking just to sort of, watch other people walk. And then they'd stop, and they'd stop because there was a funny red ball suspended in space. And the people stood there, and then the red ball became a green ball and people started to move again. And I'm like... Ohh, the green ball made people move. So I need to watch out for the green balls that make people move and red balls make people stop. Then I get to realize that red balls make cars stop, too. Because the whole conceptual track of what that meant to me earlier got erased, so I learned how to rebuild.

Frank commented on his inability to understand the meaning of traffic lights until he paid attention to the behaviour of people around him. He discussed having to rebuild an understanding of the “conceptual world” in order to function effectively in his life. Ira also noticed a shift in his sense of self:

The first few weeks back I had what I could retrospectively describe as depersonalization. Where I had feelings of not being able to consciously will things. Like feeling like, ideas in my mind would sort of spontaneously manifest with nobody thinking them. Or that, sometimes just be in the street trying to figure out what to do, just sort of aimless, like not remember how to initiate an action. They would just float out as the situation demanded it, and I would be like ‘Oh yeah, I can do that!’ It wasn't just
like being in it, I was sort of removed from it. Yeah, well, the sense of agency came and went. I didn't entirely lose it.

Ira described feeling disconnected from his self and intermittently losing his sense of agency, which he labelled as “depersonalization.” Emily also reported experiencing a similar feeling of “dissolution” of her sense of self through her meditation practice:

Everything would just dissolve, and I would just feel that there was no boundary between me and everything else. And then the boundary would come back, and I would be sent into a panic because I didn't know what was going on... Like, I'd be dissolved and there would be a part of me that would be like, ‘What's going on, what's happening to you, where are you going?’ Like, my mind was saying, ‘You wanna be a real person, you want to be a solid bounded person,’ and then the panic would set in. And then around the same time as the panic, the solidity would come back in, almost like my mind was shutting out that experience of dissolving into the environment.

Emily detailed how she felt “taken apart” because the boundaries between her self and the outside world began loosening. She stated that her “ego felt like it was being destroyed” and it was then that she realized that she “didn’t want to let go of being self-centred.” Emily believed that her mind reacted against this feeling of “dissolution” by eliciting a feeling of panic. She also felt that this may not have been an significant issue for her if she had been raised in a “context where the philosophy is more about interconnection and relationships community.” Like Emily, Alia also felt “dissociated” from her self the night after meditating at a retreat:

I had disassociation once but that wasn't while I was sitting though, that was after in the night again. So I remember, I was in the room and it was the night again and I was
lying down in a sleep like state and I woke up and I could not feel the bed. I would do this *motions touching her arm* and my hand would go through my arm. And, I was walking and I couldn't feel the ground so that was like very intense, like a mushroom type of experience.

Alia described how, after meditation, she was unable to feel her body or the environment and attributed this to “disassociation.” Several other participants found that the psychological experience of their self changed in other ways. For example, Winnie discussed how her self-esteem diminished after her meditation:

I think it initially changed when I started feeling those negative effects. I thought it was me at first. I still sometimes think it's me because most people I know experience positive benefits most of the time. So my sense of self has definitely decreased. Like, how come this is happening to me? This is not right because meditation is supposed to make you feel better not worse. I think initially, I thought there was something wrong about me. I attributed those negative factors to myself and thought it was all my fault and put the blame on me.

Winnie felt that she was meditating incorrectly, which led to feelings of self-blame. She also described feeling inadequate because she thought that meditation was supposed to be a positive experience. Many participants described changes to their experience of their self and the world around them. For example, many participants described feeling disconnected from their selves or losing the perception that they were “bounded individuals,” which several termed “depersonalization.” This often involved not being able to experience the self in a cohesive way and losing the boundary between the self and the environment. Some participants described this as a loss of a “conceptual map,” which made it difficult to understand the rela-
tion between their self and the world. Other participants found that their self-esteem was negatively impacted by mindfulness because they were unsure if they were practicing “correctly.” Participants found it difficult to function in their everyday lives after these experiences.

All participants experienced adverse effects after their engagement in mindfulness meditation practice. These experiences manifested as physical and psychological effects. Many participants noticed physical effects from their mindfulness meditation practice that included alterations in their sensory experience and physiological responses. The sensory effects they experienced included amplified sounds, intensified physical sensations, and “visual distortions.” Mindfulness also had a physiological impact on participants, including increased heart rate, difficulty breathing normally, sweating, tension, and changes in body temperature. Participants described the onset of these physical effects as intense and quick, leaving them unable to adequately adjust. All participants also noticed psychological effects from their mindfulness practice. For example, many noticed a resurgence of emotional content and childhood experiences. They also experienced emotions like fear, sadness, pain, anger, anxiety, and paranoia, with a couple participants even experiencing “visions.” Finally, most participants noticed a change in their sense of self and its relation to the environment. Participants described “losing” their sense of self or the boundary between it and the world. Others found that mindfulness had decreased their self-esteem and increased self-blame. All participants claimed that the intensity of these experiences made it difficult for them to adjust.

**Methods of Coping**

Participants were asked to reflect on how they coped with and processed the adverse effects of their mindfulness practice. Almost all participants claimed to have made attempts
to manage the difficulties they encountered. This core theme is comprised of three main themes: Seeking Social Support, Engaging in Physical Activity, and Creation of Meaning.

**Seeking Social Support**

Most participants experienced an increased impetus to seek out various sources of social support after their adverse experiences with mindfulness meditation. This need for support was often a consequence of the difficult physical and psychological symptoms participants experienced during and following their mindfulness practice. Participants accessed different avenues of support and found some to be more beneficial than others. Many were able to find the support they needed in teachers, friends, and communities who understood their experience and were able to guide them. Participants found that adequate social support eased their fears and the intensity of the experience, helped them understand their experience, and provided structure to their lives. Most participants first turned to their meditation teachers or retreat facilitators in order to cope with the distressing psychological effects that arose during the course of their meditation practice.

Alia’s attendance to her first few retreats was characterized by the emergence of distressing psychological experiences. She noted that her initial desire was to access the support structure that was provided at her retreat centre. For example, at her first retreat teachers were assigned to small groups. They possessed a level of psychological awareness and there was an easily accessible emergency hotline. Alia attributes her openness to her difficult experiences to the support she received during that time:

The first night was super intense, and I went to the teacher…all the teachers there are like psychotherapists… Basically, he was saying that this is normal, this is not abnormal. He said that this happens to at least one person a retreat where it's like, you
have a lot of stuff, you're able to sit quickly and things come up super quickly. So you need to take the gas off the pedal. So that was great. So I wasn't allowed to do as much sitting as everyone else. He was like, ‘You can only do three sits a day and then you do other things, to make sure it's not overwhelming.’

Alia pointed out that her meditation teacher was also a trained psychotherapist and so was able to help her make sense of her experience and provide advice on how to continue meditating safely. Alia’s experience had been different at other retreat centres where the support structure was lacking. Belle also turned to the leader of her meditation group when she had a deep emotional experience from her first meditation. The meditation group she attended had structured their sessions so that meditation would be followed by discussion, which allowed her to vocalize her difficulties:

We just kind of describe what happened to us in the sit, and he gives us feedback on what we've been through. Like, validation I guess?…he fully acknowledged that there were going to be things that were outside of his realm that we'd have to find other supports for, and that he would help if he could… [he] acknowledge that [my experience] was typical…I guess he was fully aware of the possibilities of taking on this on…[I felt] better for sure, I guess, even though I felt so out of control about what was happening to me… So, I would say that his comments added to…a sense of hope…he and his girlfriend sat with me and we talked and they helped me look up resources.

Belle appreciated her instructor’s acknowledgement of the seriousness of her experience. She believed that he was able to do this because of his own extensive experience practicing mindfulness in a variety of settings. His understanding and validation allowed her to seek alternate
support systems to further address the emotional issues that arose during the course of her practice. Emily also discussed receiving different styles of support from two meditation teachers:

The main meditation teacher also has a lot more experience than the first one I had….she has been doing it in a North American context…She was able to respond to a lot of the sorts of fears that would come up for me…[because] she has dealt with so many students who have freaked out and has had her own experiences of freaking out… [it] was very much like—we're gonna hold you and support you through this instead of you know, these are the rules, this is what you're supposed to do. She was flexible and she was caring and had a lot of experience with this particular kind of re-action to it.

Emily described receiving better support from a meditation teacher who had been socialized in a Western context compared to a previous teacher who had come from East Asia. She believed the Western-based teacher was able to more thoughtfully respond to her distress because she understood the fears that were arising in Emily and had difficult experiences of her own. While the previous retreat teacher had placed an undue emphasis on following the rules of the retreat centre, her more recent teacher was able to appreciate the extent of Emily’s distress and recommended a modified meditation practice for the remainder of the retreat. Similar to Emily, Winnie had a more positive experience when she received support from someone who had a personal understanding of her concerns:

The way she did it was more personal to me. She knows my whole situation and what I'm going through, so she could really tailor the practice towards my situation and she
knows the best way to guide me through it so that I won't feel even more anxious…You can't do that in a group setting because everyone has different needs.

Winnie described how the personalized approach to mindfulness that she received from her psychotherapist had been helpful. Her psychotherapist was responsive to her unique needs and indicators of distress, which allowed for the meditation to be tailored to Winnie’s specific goals.

Many participants were also able to find support in friends and partners. They found that talking about their issues with understanding and non-judgmental people allowed them to cope with their difficulties. Emily reflected on what was important for her during this time:

Lots of talking it through with people that know me…There was one group of people that are people that know me and love me and had a sense of who I am and could help me kind of sort through what the pieces of how I was thinking about myself before was still important and what wasn't. And also kind of reassure me that they would still love me even if I was really different. My partner was a big part of that…But if that were to happen, we would figure it out. She was always very consistently sure of that. So that was really important.

Emily’s friends helped her parse through the experience and understand the personality changes that had occurred during the retreat. She also found solace in her partner’s reassurance and support. Frank credits friends and a small community who have had similar “dark night” experiences for his ability to cope with pervasive adverse effects of the meditation. He reflected:

The most important thing is that I had a very close friend who is a lifelong meditative practitioner and is becoming a teacher in his own right. He basically held me. He was
there, I could share my experience with him. He basically held the experience and didn't touch it. He suggested a few things along the way, little shifts, mostly how to shift my perception of what was happening to me, not to be so reactive...When I feel free to talk to someone about what I'm experiencing, space opens up, and it's really beautiful. I can talk about it. Someone is open to talking about that side.

Frank pointed out that his friend did not try to challenge his experience but instead created a space where Frank could reflect and process the experience on his own terms. However, it was important for him to receive support from a friend who was well-versed in the meditative experience. While many participants needed social interaction to calm fears and understand their experiences, others like Ira desired it because of the structure it provided:

Just going back to that structure would've helped but I had no structure, really. That, I think, made it especially hard to recover. Every moment I wasn't with other people was hard. If I spent too much time alone, in silence and with lesser sensory stimulation, I would immediately start going back to that place, automatically—I had no real control over it.

Ira described needing social interaction to distract him from the “dissociating” effects of his meditation. He found that if he isolated himself, the sensory effects he was experiencing would intensify and pull him back into a psychologically difficult place.

In sum, the majority of participants attempted to cope with the adverse effects they experienced through social support. This support came from meditation teachers, the meditation community, friends, and partners. Meditation teachers and the community helped participants understand and process their experience through a lens that was personally relevant.
Participants found that partners and friends who were non-judgmental helped ease fears and prevented further downward spiralling.

**Engaging in Physical Activity**

All participants reported engaging in physical activity to help manage the negative effects they experienced from their mindfulness practice. For many participants, physical activities were centred on connecting the mind and body. The activities they engaged in varied in the manner they allowed individuals to connect their mind and body. All participants found engaging in physical activity to have a positive impact on their experience; however, the extent to which they used these activities differed. Yoga, various forms of exercise, and walking meditation were all popular with participants because they emphasized the interconnection of mind and body.

Several participants reported that yoga allowed them to cope with the embodied effects of their meditation. They reported that this form of activity allowed them to repair the connection between mind and body that they felt was lost through their mindfulness practice. Rayna explained:

I feel like with vipassana, I was separating my mind from my body. It was very focused on the mental…With yoga, it's understanding that you have a machine, your body is like this tool, and respecting and utilizing it…It was very much so building your relationship with yourself - that was the most important thing…The school I come from it's almost like, yoga prepares your body for meditation. You're like very aware of your body and you're going through all these emotions, so it just prepares your body. I feel like it was very connected.
Rayna described how yoga helped to train her body and gave her a deeper connection with it. She felt that mental events were overemphasized during her vipassana meditation practice, and she preferred to engage in an activity that she believed emphasized the integration of mind and body. She also found that by preparing her body through yoga, she was ready for an intense meditation practice and found an increased ability to cope with it. Emily also engaged in yoga and other mind-body integrative practices to manage the physical effects she experienced from meditation. Emily reflected:

A bit of walking meditation. Yoga or stretching, but trying to do it in a more aware way than I used to do it when I was doing it more for exercise. I briefly played around with dance-movement type of stuff, but that didn't really feel like the right thing for me…And then recently, I started doing more, but more like somatic kind of therapy… Like, mind-body integrative work.

Emily described trying dancing and walking meditation but found yoga to be more helpful. Like Emily, most participants engaged in other forms of exercise like weightlifting, dancing, running, and going to the gym. Again, these individuals found that the most powerful method of coping with the negative effects of mindfulness was by connecting the mind with the body through physical activity. Frank, in particular, credits “intense physical fitness” to his healing:

It was a deep effortful need to work in the fields of strength, fields of endurance, to meet my edge…that was a major stepping stone in making it okay. I just knew I had to strengthen the integration, the embodiment. I did lots of exercises of walking and feeling my feet on the ground. Embodiment practices are, I couldn't stress the value of having them. So I did dancing—specifically some Zumba kind of things. Mind-
body coordination stuff. Also just improvisational dance with a partner so I could learn how to move in the world again, like connect with someone. Like you have an interpersonal connection and you're doing all kinds of brain processes at the same time. You know, social context.

Frank described needing “embodiment practices” to counteract the severely dissociating effects of meditation. He stressed the importance of embodying activities to re-establish a mind-body connection he felt was lost due to his experience with *vipassana* meditation. He found mind-body activities that were social in nature to be especially helpful because they required him to integrate several aspects of his self in an interpersonal context. While the use of yoga and other forms of physical activity were utilized to manage the effects of meditation, other participants felt that they needed to engage in meditation that was more embodied in nature. When Alia began “dissociating” from her body, she began a walking meditation:

> And, I was walking and I couldn't feel the ground so that was like very intense… But I had enough mindfulness there where I was like, 'Okay, so you know this is in your head.' I just kept doing walking meditations. I kept banging my feet on the floor until I could feel it and then eventually it brought me back into my body.

Alia described how the walking meditation allowed her to come back into her body after she felt “dissociated” from the effects of her sitting meditation. Like Alia, when Ira experienced the “dissociating” effects of *vipassana*, he stopped his sitting practice and switched to a walking meditation at the advice of his retreat teachers. Ira reflected:

> The teachers recommended that I try taking some walks in nature and sort of mixing it up so I wasn't only sitting…They said things like, 'try to ground yourself'. But, I didn't understand what that meant or how to do it… I did sort of calm down a little
bit. [The meditation teacher and I] walked maybe for an hour and then I kind of felt like I was calm and I thought maybe I'll just chill out and I'll be okay. But then as soon as he left, it came back…So, I tried to walk it off and calm down and I couldn’t. Unlike Alia, Ira’s experience was more complex. While walking meditation was briefly able to ground him, the dominating effects of his psychological experience would return and interfere with his walking meditation practice. He described his state of panic and fear as being too intense to continue practicing meditation, even though, at the time, he felt he had no other way of managing his experience. However, he did find other forms of physical activity to be beneficial once he was able to gain some distance from the most severe effects he experienced:

Movement also helped too, so I did a lot of movement type stuff. So specifically, I did Tai Chi about two years after I got back from the initial retreat 6 years ago. After my divorce, I had a lot of anger come up around then and I did this Brazilian martial art called Jiu Jitsu for a year and a half. Which is a very physically intense martial art. It's tricky because I think at a certain point I wouldn't have been able to, it would've just caused me to have a panic attack, from any type of strong sensation. That's the other thing I learned after this most recent retreat, finding a balance between over-stimulation and under-stimulation was really important.

Ira also tried activities like Tai Chi and Brazilian Jiu Jitsu. The Jiu Jitsu helped with strong emotions that arose, like anger. Ira felt that Tai Chi was helpful because, he claimed, it balanced “over-stimulation and under-stimulation.” In conclusion, most participants engaged in physical activity in the form of yoga, strength training, dancing, and walking meditation to cope with the distressing effects of their mindfulness meditation practice. While most found
that the embodying effects of physical activity were profoundly positive, one individual felt that physical activity alone was insufficient to manage the extent of the distress he experienced.

**Creation of Meaning**

Another way participants coped with their difficulties was by attempting to create frameworks to derive meaning from their experiences. Almost all participants sought to make sense of the psychological content and sensory experiences that were triggered by mindfulness meditation. Many sought psychotherapy and books to provide a psychological framework for their experiences. Others found that more spiritual approaches, like shamanism, religion, and further meditation, were necessary to cope with the experiences that arose. Many found that developing psychological awareness in combination with spirituality to be most effective for managing their experiences.

Almost all participants used psychological resources to understand the variety of experiences that arose during the course of their meditation practice. Many individuals sought psychotherapy both during and after their engagement in mindfulness meditation. These individuals found that psychotherapy provided them with a way to frame their experience. Ira used two different psychological approaches to manage his experiences. He found cognitive-behavioural therapy (CBT) to be one appropriate method for managing his symptoms of panic:

So I started a course of CBT with exposure therapy and that really helped with the anxiety… I think that if had more CBT type therapy right after the retreat with education on the nature of anxiety and panic, I might not have developed panic disorder. I did see an anxiety specialist once or twice but because we didn't have coverage and
we didn't realize how serious or long-term the problem would be at the time, I didn't keep seeing him. I probably should have.

Ira described seeing an anxiety specialist to do CBT with exposure therapy. While he found it helpful to learn about his symptoms of anxiety and panic, he reported that it would have been more beneficial for him to do it immediately after he started experiencing symptoms. He later decided to take Ativan to control his symptoms of panic. He also worked with a Jungian analyst to cope with the difficult imagery he encountered during his meditation practice. He found the Jungian approach to be particularly well-suited to counteracting the deconstructive effects of meditation:

> I was having all this crazy archetypal imagery... But, I had no idea how it was related to my regular life... So, working with that therapist, I was eventually able to ground a lot of it. I found it very helpful to use the Jungian approach because I could attribute meaning to those images. Again, it was working counter to the direction that the mindfulness practice tends to work in...with the Jungian approach there's this sort of emphasis on crystallizing things and bringing things out from this unformed, unconscious into the more formed in symbols and that sort of thing...the whole emphasis on individuation was very helpful. It was sort of like how to rebuild a self. It felt like, in some ways, my sense of self had really been shattered.

Ira was inundated with Jungian archetypical imagery for four to six months after his retreat and found the Jungian approach to be helpful for rebuilding his fractured sense of self. Frank approached psychological work through psychotherapy and books using psychodynamic and Gestalt perspectives. He found that voice-dialogue therapy worked for him and managed to
ameliorate a significant portion of the symptoms of depersonalization he experienced from meditation.

Voice-dialogue, archetypes…It took Almaas to use the word 'rage', narcissistic rage. I needed a visual representation…So there's the enlightened archetype and then there's this terrified animal archetype. The terrified animal will not die. The terrified animal will not surrender to what is…'Cause all Almaas said was that the void is really hard to accept because of the implications of one's own non-existence…So, somehow the psychological model, the voice-dialogue model, with the awareness part and this embittered, rageful, resistant, cheated, victimized part. And these two are having at it. It wasn't that I really had to do anything, I just had to see that.

Frank found that a combination of voice-dialogue therapy and psychoanalytic perspectives clarified the personal and transpersonal elements of his depersonalization in a way that more popular forms of psychotherapy could not. Frank had also attempted to continue with meditation but found the experience heightened and intensified his adverse effects so he was forced to abandon formal mindfulness meditation practice permanently. Alia worked with a psychotherapist who was also a meditator:

Well, I found my therapist on a meditation retreat so that was really helpful. For me, after I was meditating so much, that was like the path for me. So, I wanted a therapist who was a meditator and ideally had more experience than me…So, I found a therapist on a retreat who was really helpful because she was able to come at it from that perspective, which is a perspective I really appreciate. Also, she went through a similar experience personally, so that was really helpful…All this stuff was coming up on the retreat and this one teacher who was also a therapist was like you have PTSD
[post-traumatic stress disorder] and you need to go home and do EMDR [eye-movement desensitization therapy]. That's exactly what I did. It was really helpful. Working with a therapist who maintained their own meditation practice was essential for Alia. Her therapist possessed an appreciation for spiritual practices and had a depth of knowledge in the field of psychology, which helped Alia clarify her experience and direct her to other psychological treatments that would better address her underlying issues. She later returned to meditation in a more controlled manner to continue the personal, psychological work that she felt was necessary to heal her from past experiences. Like Alia, other participants also found it necessary to reincorporate meditation into their lives alongside psychotherapy. Emily also continued with meditation while she attended psychotherapy:

So that was probably the piece that I needed the therapy around the most. It was sort of like, how do I undo this new fear of sex that I've just created for myself… some therapy helped… the only thing that would really help was meditating… I was like terrified of meditating… I had panics frequently when I was meditating but… Observing the panic was actually the only thing that was helpful… So, like in vipassana, it's called sankaras… The way that it was described that sort of resonated the most with me… And the patterns that we repeat many times in our lives are more like canyons and take longer to undo… meditation is observing those reactions and those patterns and letting go of pieces of them.

While Emily found psychotherapy to be helpful to manage her fear and anxiety, further exploration was made possible through continued vipassana practice. A Buddhist philosophical explanation of her anxiety as “sankaras” (i.e., conditioned responses) deeply resonated with
Emily. Emily also reported that meaning came through a combination of meditation and neurological theory:

I've been becoming obsessed with neurology and mind-body integration. That's been really helpful. There's certain ways in which things felt very magical to me at the 10-day, and I was like, what is this weird energy that I'm experiencing. Like, I came back and I was so hypersensitive to things… Like, I was just like spinning off… But, I also needed something for the left brain part of me, something that was more like—why is this happening? Why am I experiencing this? So understanding brain-body integration. Like, left brain, right brain, all of that's been really helpful.

For Emily, it was a balance between psychological and spiritual perspectives that ultimately allowed her to frame and integrate her negative experiences. Most participants used a combination of psychotherapy and spirituality to create meaning out of difficult and overwhelming experiences. Participants reported that psychological methods, like CBT, psychopharmacology, psychoanalytic approaches, and EMDR helped them stabilize the initial intensity of their experiences. Once participants were able to understand their experience through a psychological lens, they further explored and clarified these experiences through personal and spiritual work which included meditation.

Overall, all participants found that a variety of coping methods helped to relieve the intensity of the adverse effects they experienced. Participants sought out different forms of social support in the form of meditation teachers, community, friends, and partners. These people helped by providing a non-judgmental space for participants to share their experience, which had the effect of easing their fears and worries. Many participants also engaged in physical activity (e.g., yoga, dance, tai chi, jiu jitsu, strength training, running, walking medi-
tation), which helped to integrate body and mind. Finally, all participants felt that they needed to create meaning out of their experiences, with many using a combination of psychoeducation, psychotherapy, and meditation. Many participants expressed that they would not have been able to move forward and rebuild their lives without the support they had received.

**Summary of Results**

The results of this section can be organized and summarized based on three core themes that illustrate participants’ experiences of adverse effects from mindfulness meditation. The three core themes are: Individual and Contextual Factors, Adverse Effects, and Methods of Coping. These themes provide a preliminary map of the adverse effects participants experienced including the context in which they were experienced and attempts to manage the effects of their meditation practice.

The first core theme, Individual and Contextual Factors, describes the experiences in participants’ lives that led them to mindfulness meditation as well as the sociocultural context in which mindfulness was practiced. This core theme organized participants’ experiences into four interrelated sub-themes: Personal History and Personality Factors, Motivation and Expectations, Transitional Period, and Cultural Tensions. Many participants had features in their personality or personal history that influenced their meditation experience. For example, participants described childhood traumas, previous mental health issues, lack of awareness about their personal psychology, and an intense and focused personality-style. Prior to their engagement in mindfulness meditation practices, participants were often unaware or ignorant of the purpose and goals of mindfulness. Many believed that it would help to clear their mind, relax, and work on personal problems. Several participants also pursued mindfulness for spiritual goals. Consequently, they were surprised when the actual experience of these ideals differed from their expectations. Most participants also reported undertaking mindful-
ness during a time of transition in their lives. This transition period was characterized by changes in close relationships, jobs, education, housing, and identity, which created a feeling of stress and instability. Many participants also described a resulting tension when they practiced mindfulness in a Western context. This was due to issues around teaching styles and support as well as differences in the implicit goals and values of Eastern and Western cultures. As a result of these differences, many participants found that practicing classical Buddhism in a retreat setting led to difficulties during their initial stages of practice.

The second core theme, Adverse Effects of Mindfulness Meditation, describes the variety of negative effects that can occur through mindfulness meditation practice. These effects were organized into two sub-themes: Physical Effects and Psychological Effects. Physical Effects refers to the impact mindfulness had on participants’ bodies. Results showed that participants most often experienced sensory effects and physiological changes within their bodies that they found to be severely uncomfortable and disruptive. Several participants described auditory and visual hypersensitivity that prevented them from living their lives in a normal way after their meditation. Many participants also described physiological effects like strange sensations in their bodies, a racing heart, pain, extreme temperature changes, and difficulty breathing. The adverse psychological effects of mindfulness included panic attacks, depression of emotions and memories, and an altered perception of the self and world. Several participants described experiencing symptoms of a panic attack, which included increased feelings of fear and feeling like they were going to die as well as physical symptoms like difficulty breathing and increased heart rate. All participants found that emotions and memories arose, at times unexpectedly, while they were engaged in mindfulness practice. These emotions included intense fear and terror, sadness, anger, anxiety, and negative memories. Sever-
al participants noticed the emergence of childhood traumas, and one participant found that the fear related to these traumas manifested as “hallucinations.” Participants also experienced a change in their sense of self and the world around them following meditation. They described experiencing the Buddhist concept of the empty self, increased insecurity, confusion, loss of agency, and “depersonalization” and “dissociation.” This experience of depersonalization was characterized as not feeling in one’s body and dissolution of the boundaries between the self and the world. Participants also discussed losing their conceptual map of the world, which led to difficulty functioning in their daily lives.

The third core theme, Methods of Coping, refers to the various practices participants undertook to manage their experiences in mindfulness meditation. Participants’ methods of coping with the effects of mindfulness were organized into three sub-themes: Accessing Social Support, Engaging in Physical Activity, and Creation of Meaning. Participants often sought the support of partners, friends, and their meditation group and teachers following adverse experiences. They felt that support from these people helped them feel less isolated due to their experiences. Validation and non-judgment was also an important aspect of this support as many participants felt surprised by the magnitude of the effects and resulting confusion they experienced. Participants also engaged in various forms of physical activity that tended to emphasize mind-body integration like yoga, walking meditation, and other forms of exercise (e.g., dance, weight lifting, running, tai chi). Participants found that these embodying activities allowed them to reconnect with themselves and manage both the physical and psychological effects of mindfulness. Participants also sought out experts, healers, and psycho-educational tools to clarify and organize the effects of the meditation into a comprehensible picture. Participants talked to experts like psychologists and meditation instructors, and
found those who were well-versed in both fields to be most helpful in helping them understand their experience. Cognitive-behavioural therapy, neurology, Jungian and psychoanalytic theories, and the voice-dialogue model also helped participants create a framework around the physical and psychological effects they experienced. Many even found that continued mindfulness practice in a controlled and guided manner helped them further explore the experiences that arose. Ultimately, these approaches helped participants rebuild their fractured sense of self and re-establish a conceptual map that they felt was lost through meditation.

Overall, participants described complex experiences with mindfulness meditation. While many reported intense experiences and difficulties during their mindfulness practice, several also recounted positive experiences that led them to continue practicing mindfulness. Though uncomfortable and disruptive at the time, in retrospect, many participants described their adverse effects as part of a journey that resulted in greater well-being. Participants’ decisions to continue or cease practicing mindfulness were related to their unique experience, which arose through an interplay of personal and sociocultural factors.
Chapter Five: Discussion

The present study sought to qualitatively investigate individual experiences with the adverse effects of mindfulness meditation. Given that previous research has identified that some individuals do experience adverse effects in a variety of settings, a major rationale for the study was to uncover the contexts in which these effects occur. In addition, the current study also explored coping strategies for dealing with adverse effects. The results of the study will be discussed in relation to extant academic literature on the adverse effects of meditation for the purpose of establishing commonalities and differences. Due to the preliminary nature of the present study, grounding the results within existing literature will necessitate going beyond the scope of mindfulness meditation research. The results chapter outlines participants’ journeys from the circumstances that led them to seek mindfulness meditation, to the contexts in which they experienced adverse effects, and finally, how they attempted to deal with the repercussions of their practice. The following section will be organized around the three core themes that emerged from participants’ narratives: Individual and Sociocultural Context, Methods of Coping, and Adverse Effects of Mindfulness Meditation. Using these core themes, the findings will be situated within the context of psychological and religious texts that relate to intercultural differences, interventions, personality theory, spirituality, and more broadly, the field of counselling psychology. First, individual and sociocultural contexts will be discussed in relation to research on personality theory and Eastern and Western cultural differences. Next, the adverse effects that participants experienced will be compared to existing literature on the range of adverse effects that can occur from meditative experiences. Finally, methods of coping will be discussed in relation to research on coping strate-
gies and mind-body integration. In conclusion, a theoretical model will be proposed that traces the paths people take when experiencing adverse effects.

**Individual and Sociocultural Contexts**

Participants described the individual and sociocultural contexts of their lives that led them to mindfulness meditative practices and influenced the nature of their experiences. These contexts refer to personality differences, motivations and expectations, life circumstances, and cultural tensions that participants believed may have led to or exacerbated their experience of adverse effects. The results of the study expand upon limited meta-review and case study literature which suggest that the context surrounding meditative practices can influence outcomes (e.g., Lustyk et al., 2009; Kuijpers et al, 2007; Shapiro, 1992b; Walsh & Roche, 1979).

Results of the present study show that individual contexts like personality and personality history, motivation and expectations, and life circumstances can influence one’s experience of mindfulness meditation. This is consistent with Buddhist literature on the precipitants of adverse effects. Buddhist monks, Namto (2011) and Buddhaghosa (1975) posit that adverse effects can emerge under certain circumstances, including for example, individual propensities towards negative experiences and inappropriate guidance. Western psychological literature also suggests that an individual’s personality and personal history can influence the trajectory of their meditation (e.g., Aronson, 2004; Engler, 2003; Suler, 1993; Vanderkooi, 1997). Germer et al. (2016) proposed that individuals with “fragile personalities” (p.129) or who lack cognitive strength should not engage in lengthy mindfulness practice. While Germer et al. (2016) did not specifically define what they meant by that term, it seems to support other scholars’ notion that those with certain elements in their personal history should refrain from meditation (Dobkin et al., 2011; Engler, 2003; Germer et al., 2016).
Emotional lability was also a frequently cited precursor to experiencing negative effects, but the present study is inconclusive, as participants did not report notable features in their mental health histories related to this hypothesis. Shapiro (1994) has said that those with a history of psychosis, somatization disorders, hypochondriasis, dissociation, and schizoid and schizotypal personality disorder should refrain from meditation. While most of these disorders were not present in this study’s sample, participants whose main adverse effect was the experience of dissociation reported that they had no history of dissociation or depersonalization, suggesting that an unknown factor mediates the relationship between life history and type of adverse effects experienced. At the same time, however, Shapiro (1992b) found that cognitions prior to meditation were correlated with the experience of adverse effects, corroborating Suler (1993) and Engler’s (2003) observations that mindfulness practice can exacerbate certain mental propensities. The extant literature ultimately shows contradictory findings regarding the precursors of adverse effects, as those with and without psychiatric histories have been shown to experience adverse effects (Kuijpers et al., 2007; Sethi & Barghava, 2010; Yorston, 2001).

There are several possible ways to interpret the findings in the literature: participants had genuinely never experienced mental health issues prior to their meditation; they had issues that were mild in nature; or their prior issues had an indirect relationship to their difficulties post-meditation. The present study found that most participants’ mental health issues had been mild and the effects of the meditation intensified those issues and made them difficult to ignore. Overall, the findings indicate that there is a correlation between adverse effects and individual histories. However, participants appeared to be unacquainted with their own personal psychology prior to meditation, and thus, unable to determine the nature and extent
of their previous difficulties. These findings lend support to the notion that those without prior histories may have lacked emotional intelligence and awareness about their personal history and psychology, providing further evidence for Kuijpers et al.’s (2007) case study observations.

The study’s findings support the notion that mindfulness can intensify latent psychological issues or trigger early traumas (Engler, 2003; Suler, 1993; Walsh & Roche, 1979; Welwood, 2000; Vanderkooi, 1997). While almost all participants had no previous history of serious mental health issues, they described their previous psychological difficulties as being mild, manageable, and situation-specific. Several participants also indicated that they lacked an understanding about mental health in general, for example, having no understanding anxiety or panic. Following meditation, however, previously mild mental health issues became exacerbated, possible due to the intense self-focus that takes place (Crane & Williams, 2010; Wells, 2002). Again, these findings provide empirical evidence of scholarly work by Engler (2003) and Suler (1993) that suggests that mindfulness can exacerbate latent personality pathologies.

Latent personality pathologies can manifest in several ways. For example, the current study found that there were several personality qualities that led participants to approach mindfulness practice in unhealthy ways. More significant disruptions occurred when mindfulness was practiced rigidly and intensely, during long periods of practice. This may be related to a perfectionistic and achievement-focused personality style. This personality style has not been previously accounted for in the mindfulness literature. However, personality research shows that perfectionistic personalities are characterized by the need for control and the tendency to set unreasonable standards, which can lead to psychological distress in the
form of anxiety and depression when this control disappears (Dunkley, 2000). Mindfulness has been known to loosen cognitive control (Germer et al., 2016), which is why it may have triggered mental health issues for these personality styles.

Related to this, participants often desired to continue meditating even after adverse effects began emerging, citing feelings of attachment and an unconscious compulsion to practice. While personality is a factor, this is also likely due to mindfulness’ tendency to produce feelings of bliss and relaxation (Buddhaghosa, 1975; Namto, 2011). These feelings of bliss and relaxation are normally associated with strong concentration meditation practice (Namto, 2011). However, according to Namto (2011), concentration meditation can also lead to dissociation. Participants’ experiences appear to confirm these hypotheses. The current study suggests that an unhealthy attraction to states of bliss, associated with concentration mediation, may lead to dissociative states. Vanderkooi (1997) also found that a preoccupation with non-ordinary states of consciousness (NSC) led to psychotic episodes. While the results of the present study do not indicate that an over-identification with these states necessarily leads to psychosis, it tended to precede disturbances like depersonalization and other altered perceptions.

Furthermore, several participants appeared to have had an issue with what Welwood (2000) termed spiritual bypassing. Spiritual bypassing refers to practitioners’ tendency to use mindfulness to circumvent psychological issues to achieve spiritual growth and enlightenment. In this way, mindfulness can unintentionally reinforce certain cognitive and behavioural tendencies. According to Welwood (2000), spiritual bypassing can also result in a sudden emergence of psychic content for the participant. Other literature also suggests that mindfulness allows individuals to confront issues that they have been actively avoiding (Salmon et
al., 1998), despite it often being used for the purpose of avoidance (Crane & Williams, 2010; Namto, 2011; Welwood, 2000). The results of the study suggest that spiritual bypassing is tied to motivations and intentions for mindfulness practice, which are rooted in individual personality differences. Several participants discussed being sold the flawed notion that spiritual development was of the utmost importance and that it would have positive repercussions on other lines of development, (i.e., within the interpersonal, psychological, and physical domains). In the process of distilling mindfulness into its most essential components, secular interpretations fall short of capturing the holistic and systematic nature of its classical form (Rapgay & Bystrisky, 2009). Buddhism stresses the importance of developing wisdom and ethical living alongside mindfulness (Thera, 1998). Participants later recognized that their unbalanced spiritual growth lacked support from these other lines of development and caused them to fall into dysfunctional states. The results indicate that several personality styles appear to contribute to the experience of adverse effects. Personalities characterized by rigidity, intensity, perfectionism, avoidance and repression appear to be common among individuals who experience adverse effects from mindfulness meditation.

Mindfulness can also lead to confrontation with past experiences and trauma. Some participants believed that they had dealt with these issues and were unaware that there were any lingering difficulties. Traumas tended to manifest as vivid re-experiencing or through distorted, tangentially-related imagery that was often violent in nature. Research on mindfulness and trauma indicates that the practice can be helpful for certain aspects of trauma (Follette, Palm, & Pearson, 2006). However, meta-reviews suggest that it can be risky unless mindfulness practice is significantly modified (Lustyk et al., 2009). Nevertheless, it can be difficult when meditators have not conceptualized their past experiences as trauma, leaving
them vulnerable to being triggered. Based on the findings of the literature (Follette, Palm, & Pearson, 2006; Lustyk et al., 2009) and the present study, it appears to be inadvisable for those with previous histories of trauma to practice mindfulness unless it is in a controlled setting with a teacher who is well-versed in both psychology and meditation.

What is apparent is that personality styles and personal histories need to be identified and supported by experienced guides. Meditation teachers and psychotherapists alike need to be aware of the personality-styles that individuals bring into their meditation practice which may cause them to practice in a particularly harmful way. Without a guide who possesses foresight and experience, the practitioner can unintentionally further their existing pathologies (Engler, 2003; Suler, 1993). For example, Didonna and Gonzalez (2009) have suggested that people suffering from feelings of emptiness may be prone to experiencing panic and dissociation, thus requiring the guidance of an “expert therapist” (p. 143) because the experience can be overwhelming. These feelings of emptiness were often associated with PTSD, as well as several other disorders. The results of the study appear to confirm Didonna and Gonzalez’s (2009) suggestion that experiences of emptiness (e.g., in those who had experienced past trauma) are related to dissociation and depersonalization. The present study suggests that many normal individuals can experience extreme panic and dissociation. However, many of these participants who believed they were normal had elements in their personal history and personality, like trauma and anxiety, that would have needed to have been identified by an “expert” prior to mindfulness practice.

Vanderkooi’s (1997) study of Buddhist teachers’ perception of their students showed that they observed a link between personality styles and the tendency to experience non-ordinary states of consciousness. For example, teachers identified students who practiced too
much, were “high strung”, emotionally volatile, prone to self-pity, and anxious as being more likely to have adverse effects. While Vanderkooi (1997) did not provide a definition for ‘high strung’, it suggests an individual who is possibly anxious or intense. Thus, the results of the present study confirm that participants who were intense, perfectionistic, anxious, and who practiced too much tended to experience adverse effects. While Vanderkooi (1997) did not provide a definition for ‘high strung’, it suggests an individual who is possibly anxious or intense. Thus, the results of the present study confirm that participants who were intense, perfectionistic, anxious, and who practiced too much tended to experience adverse effects. While Vanderkooi (1997) suggested that those with anxious traits may be more likely to experience psychosis, the present study does not support this notion. There appeared to be a more linear correlation between past experiences and the nature of adverse effects, as those with anxiety were more likely to see it become intensified than transformed into a psychotic episode. The results of study suggest that mindfulness teachers need to exercise prudence by being vigilant for possible antecedents of adverse effects, especially when practitioners themselves are unable to recognize their own past difficulties.

The findings of the current study suggest that post-meditation distress may be related to participants’ being in a period of transition in their lives. While personal history touches on more distal contextual factors that may influence the nature of one’s mindfulness practice, life transitions discusses possible proximal factors that may have contributed to the experience. The findings show that many participants were experiencing a flux in their lives related to changes in their relationships, roles, and identity. This appeared to create feelings of stress, uncertainty, and emotional lability that were brought into practice and intensified by mindfulness’ hyper-focus on the self (Wells, 2002). The present study suggests that individuals often engage in mindfulness practice to deal with these uncertainties. Research on life events and illness suggests that the stress from these experiences can trigger psychiatric disturbances (Rabkin & Struening, 1976). Previous case study literature (Kuijpers et al., 2007) also noted
their participant’s work and relationship stress, which were believed to have contributed to a psychotic episode following engagement in a non-mindfulness meditation retreat. Shapiro (1992b) also suggested that cognitions prior to meditation were related to the subsequent experience of adverse effects. The current study’s findings indicate that negative cognitions may be due to current life stressors, in addition to personality. Thus, the study expands upon what is known about different types of life stressors that meditators bring into their practice. Research on stressful life events (Rabkin & Struening, 1976) supports the notion that mindfulness is a catalyst but may not be the cause of adverse experiences.

Culturally-rooted motivations and expectations also influenced the consequences of mindfulness practice. Engler (2003) scholarly work suggested that tensions could arise when mindfulness is practiced in the West due to differing notions of the self and health and wellness. Engler (2003) posited that adverse effects can occur when mindfulness is used as a tool to address the psychological self, a common misunderstanding of the differences between Buddhist and Western notions of the self. Thus, several participants’ motivation for undertaking mindfulness practiced stemmed from this inaccurate understanding of the purpose and nature of the practice. For example, many described using mindfulness to address personal issues during a transition period in their lives. They commented on their desire to understand themselves or work on personal problems. However, the self that they were intent on discovering referred to the psychological self, rather than the Buddhist notion of the empty self. Several participants also reported a desire to escape from life stressors and believed mindfulness would be an easy way to achieve relaxation, calm and clarity. Mindfulness was also undertaken because of the positive promotion surrounding the practice. The findings also show that mindfulness meditation is also popular among spiritual seekers who are pursuing en-
lightenment. These findings are in line with scholarly works by Engler (2003) and Welwood (2000), which state that mindfulness has been misinterpreted in the West and used as a substitute for psychological development. These motivations to practice mindfulness are based on cultural understandings of health and wellness (Aronson, 2004; Engler, 2003). The participants in the study erroneously believed that mindfulness would be an easy method to achieve clarity. However, the term clarity does not appear to be interpreted through the original Eastern philosophy of clearly seeing the three marks of existence (i.e., impermanence, conditionality, emptiness; Thera, 2006). According to participants’ accounts, clarity has been interpreted through the Western-psychological notion of problem-solving. These differing notions point to differences in how practitioners in the West use mindfulness, distorting it through a lens based on their specific socialization history (Aronson, 2004; Engler, 2003). Several participants had no understanding of the connection between Buddhist philosophy and mindfulness practice, unaware of mindfulness’ original goals and purpose. Even those that were aware found that they had an inaccurate understanding due to expectations rooted in their enculturation in Western society. For example, the study found that panic and anxiety can be triggered when practitioners reject the experience of self-dismantling that can occur through mindfulness. Practitioners in the West use mindfulness to develop the self rather than disassemble it, which was mindfulness’ original purpose. Consequently, mindfulness can surprise practitioners once it fulfills its original purposes. Due to their own misunderstandings and those that had been communicated to them through various sources (i.e., teachers, therapists, general public), many participants found that the adverse effects were difficult to cope with because they were unprepared and misinformed.
The present study shows that adverse effects were often experienced during and following participation in a **vipassana** retreat setting, confirming previous research (Sethi & Barghava, 2010; Walsh & Roche, 1979). Retreat settings have shown to elicit adverse effects due to prolonged meditation practice, social isolation, along with reduced sleep and food-intake (Sethi & Barghava, 2010; Walsh & Roche, 1979). Experiencing adverse effects following mentally and physically taxing events has been previously explored. Researchers have suggested that stress and prior vulnerability can trigger mental health difficulties (Ingram & Luxton, 2005). Integrating this research with the study’s findings, it appears that stressors at the retreat can exacerbate vulnerabilities that lie in practitioner’s personality and personal history. Research also shows that social isolation can increase the likelihood of experiencing mental health issues (Kawachi & Berkman, 2001). While retreat settings try to mimic the original context of mindfulness practice (i.e., monasteries), it is an artificial and temporary space that may not be suited to Western practitioners’ needs. For example, while the setting allows people to practice among other practitioners for a period of time, it inaccurately reflects mindfulness’ original context. In that context, monks are united by similar cultural backgrounds, experiences, and extended time together which created social cohesion (Gethin, 1998). According to research (Kawachi & Berkman, 2001; Thoits, 2011), this level of social affiliation is protective against mental health disturbances. In contrast, community-based meditation produced briefer, less intense effects. However, if adverse effects had initially been experienced during a retreat, community-based mindfulness practice was shown to trigger subsequent episodes of equal magnitude. Nevertheless, the most common effect experienced in community-based settings was the upwelling of psychic material.
In conclusion, it appears that personality and personal history play a large role in the experience of adverse effects, confirming the findings of previous literature (e.g., Engler, 2003; Germer et al., 2016; Shapiro, 1994; Suler, 1993; Welwood, 2000). However, the study’s findings expand on what types of personalities can contribute to adverse effects. For example, personality traits like intensity, rigidity, and perfectionism led participants to practice inflexibly, despite emerging difficulties. These are associated with neuroticism, which has been implicated in a variety of mental health issues like anxiety and depression (Kotov, Gamez, Schmidt, & Watson, 2010). Individuals who had a tendency to avoid or suppress their feelings and emotions noticed a rapid re-emergence of this psychological material, similar to Crane and Williams (2010) observations. However, in contrast to their observations, the present study revealed that normal individuals also tend to avoid their experience in pathological ways, contributing to the sudden emergence of repressed material. These findings also provide empirical evidence for Welwood’s (2000) argument that Westerners’ use mindfulness to spiritually bypass, or avoid, their mental health issues. While personality traits are a factor in the experience of adverse effects, many individuals appear to be unaware of their own psychology and nuances in their personal history. Thus, it is recommended that practitioners develop some awareness around their personality styles and early formative events that may be unresolved and likely to emerge following mindfulness meditation. Simultaneously, the study encourages those teaching mindfulness to develop an awareness of how personality can influence one’s style of meditating, and develop practical solutions for managing students’ experiences, confirming Vanderkooi’s (1997) and Didonna and Gonzalez’s (2009) findings. Life transitions are also implicated in the emergence of adverse effects, which had been previously touched on in Kuijpers et al.’s (2007) case study. The stress of
this transitional period combined with participants’ preexisting personal vulnerabilities may be triggered by mindfulness practice, in line with the stress-vulnerability model of mental illness (Rabkin & Struening, 1976). The study also provides empirical evidence that there are cultural tensions present when Western individuals practice mindfulness (Aronson, 2004; Engler, 2003; Welwood, 2000). Many practitioners use mindfulness to develop their psychologically-based self, despite the practice being originally used to dismantle the self. The findings also indicate that mindfulness is inaccurately advertised as a positive, relaxing, wholly beneficial activity, which can lead to surprise when practitioners begin experiencing adverse effects. Being unprepared for the possibility of encountering difficulties meant that practitioners were bewildered and unsure of how to cope when they did occur. Thus, while the individual and sociocultural contexts surrounding mindfulness practice can lead to adverse effects, they can largely be attenuated through various coping methods.

**Methods of Coping**

There is a shortage of research discussing how individuals have coped with their adverse experiences due to the pervasive notion that mindfulness is a method of coping in and of itself. Researchers have been slow to acknowledge that there may be side effects from mindfulness practice. Thus, the study’s findings offer a preliminary account of how individuals cope with the difficulties that stem from their mindfulness meditation practice. The strategies participants used to cope are popular ways of coping with mental distress in general. However, the results of the study emphasize a theme of balance, as it was important to use multiple supports and activities to achieve lasting wellness. The findings suggest that a synthesis of different practices and perspectives can bring about the greatest healing. Overall, the findings suggest that a combination of social support, mind-body integrative activities, and development of psychological awareness can help individuals cope with the distressing ef-
fects of their meditation. These findings will be compared to psychological literature on coping methods to understand how and why they are able to ameliorate mindfulness’ adverse effects.

The extant literature on coping with adverse effects results from case studies on a range of meditative practices (Kuijpers et al., 2007; Sethi & Barghava, 2010; Walsh & Roche, 1979) and observations from Buddhist monks (e.g., Buddhaghosa, 1975; Namto, 2011; Thera, 1998). These scholars, in particular, have observed the use of a few coping strategies and their limited success for individuals who have engaged in extended meditation practice. The studies focused on stabilizing adverse effects, often through the use of psychological and pharmacological interventions. However, these interventions rarely resulted in lasting change, with participants often relapsing. The current study found that for sustained healing, a more comprehensive transformation needs to take place through a combination of coping strategies. These coping strategies target specific areas of difficulties that can arise during the course of mindfulness practice, allowing for reintegration of aspects that can be lost through mindfulness practice.

The psychological literature has extensively discussed how social support provides validation and promotes healing (Cohen & Wills, 1985; Thoits, 1986). The Buddhist literature on the adverse effects of mindfulness touches on how support from an experienced guide can also help to attenuate adverse effects (Namto, 2011; Thera, 1998). By integrating these separate findings, the current study suggests that support from psychotherapists, meditation teachers, and peers are important. Overall, the study found that for healing to take place, individuals need to feel that their supports understand their experience and are able to offer them insights that are in line with their worldview (Galanter et al., 2007). Generally, howev-
er, spiritual teachers and psychotherapists alike possess limited knowledge that is based on
their cultural views of health and wellness, so a balance of these perspectives is necessary
(Aronson, 2004).

Experts and peers were able to suggest limited interventions to deal with the initial
emergence of adverse effects. These sources of social support allowed individuals to share
their experience with people who were non-judgmental and who helped them learn alternate
coping strategies. Social support was the front line for managing adverse effects since other
individuals were often present during participants’ adverse experiences. Social supports need
to be careful to not invalidated individual experiences of adverse effects due to limited un-
derstanding. Often, participants received better support from individuals who were able to
appeal to their multiple worldviews, offering empathy and support along with insight. The
study found that receiving initial support also required that the rules and traditions of the
meditation setting needed to be modified. Retreat centres that were cognizant of the possibil-
ity of adverse effects occurring had supports readily available so that practitioners could re-
ceive individualized support at any time. This tacit acknowledgement that adverse effects
could occur meant that supports could be prepared to respond flexibly and thoughtfully. The
study also found that social support from other meditators was important for healing. Similar
to the support that meditation teachers provide, other meditators can participants reduce feel-
ings of isolation through sharing of their own meditative difficulties. Social support also pro-
vides structure, allowing practitioners combat social isolation and reintegrate into normal
life. The findings show that being provided a safe, non-judgmental space to process difficul-
ties was essential for healing to take place. Thus, it appears important that social support is
flexible, understanding and caring. Nevertheless, the findings show that a deeper level of so-
cial support involves providing a personally-relevant lens to frame difficult experiences and calm fears. This type of support necessitates an understanding of psychology and Western culture to appropriately respond to the needs of Western practitioners of mindfulness.

The current study also found that physical activities that helped to restore the connection between mind and body were essential for healing. Oftentimes, these activities were used to ameliorate the physical and psychological effects of the meditation. While no known studies have explored the effect of physical activity in conjunction with mindfulness, physical activity has often been shown to be a powerful coping strategy (e.g., Kim & McKenzie, 2014; Scully et al., 1998). Scully et al. (1998) showed that physical exercise increased positive moods and self-esteem as well as stress responsivity. Kim & McKenzie (2014) found that an important motivation for engaging in physical activity was to establish a mind-body connection. Several mindfulness-based interventions also use physical activity in the form of walking meditation for the purpose of developing mind-body awareness and integration (Prakhinkit, Suppapitiporn, Tanaka, & Suksom, 2014; Salmon et al., 2009). Buddhist monks have known that switching to embodied practices can mitigate psychological adverse effects (Namto, 2011). The present study confirms that various sources of physical activity were found to counteract the adverse effects of meditation, especially dissociation and anxiety. The findings also suggest that more extensive, intense, and longer-term physical activity needs to be undertaken to lessen the more profound adverse effects. For example, walking meditation, while helpful for attenuating the initial emergence of adverse events, was shown to be insufficient for preventing further deterioration.

The study’s findings suggest that embodied practices are beneficial for both the physical and psychological effects of meditation, but depend on the degree of the disturbance.
More powerful disturbances to the body and psyche need to be countered with more deliberately integrative forms of physical activity. For example, yoga was a frequently cited method of working on mind-body integration. There is extensive research (e.g., Gaiswinkler & Unterrainer, 2016; Salmon, Lush, Jablonski, & Sephton, 2009) on yoga’s ability to foster the mind-body connection and ameliorate mood disturbances. Yoga and mindfulness meditation are different because movement practices are not central to mindfulness practice (Salmon et al., 2009). Van der Kolk (2006) found that physical movement was essential for nervous system regulation, as it can provide an alternate focal point beyond the overwhelming internal sensations that can be elicited by mindfulness practice (Salmon et al., 2009). Research on yoga and biofeedback also suggests that yoga and other integrative activities lead to significant reductions in the pressor response (i.e., arterial blood pressure) when faced with mental stress (Patel, 1975). This suggests that yoga, and possibly other types of exercise, regulates the nervous system during stressful experiences by way of a biofeedback mechanism. This finding is supported by Salmon et al. (2009) who suggested that “yoga and other repetitive motion patterns appear to restore and entrain the rhythmicity of biological functions that are often disrupted during periods of stress” (p. 62). The current study also shows that while the psychophysiological effects of physical activity were beneficial, practicing them in a social context was important for those who had felt isolated. Overall, the theme of integration was common among participants, and the findings suggest it was important to develop a more embodied form of awareness. While we know that lengthy sitting practice can be problematic because it is stressful (e.g., Walshe & Roche, 1979), the present study offers an explanation of why this may be occurring and why physical activity was necessary to recover from the negative consequences. The current study found that lengthy and intensive sitting practices
can result in a separation between mind and body, which most participants felt needed to be reestablished following their practice. Thus, processing emotions and experiences through embodied activities which help to target the mental, physical and social side-effects of mindfulness practice allows for holistic transformation.

Another popular way of treating disturbances from mindfulness meditation was through the use of pharmacology. However, contrary to suggestions found in research, case studies and meta-reviews (Crane & Williams, 2010; Dobkin et al., 2011; Sethi & Barghava, 2010; Yorston, 2001), the current study found that practitioners, even if they were clinical cases, did not necessarily require pharmacological intervention. The use of pharmacology was not widespread among participants, suggesting that only in specific instances may it be necessary to manage adverse effects (e.g., recurring panic attacks). Though several participants met the clinical threshold for relatively serious psychological disorders (i.e., PTSD and depersonalization), pharmacology only appeared to be useful to stabilize rather than bring about comprehensive healing.

Finally, the study demonstrates that creating meaning out of the experience was an important aspect of healing. The notion that individuals need to create meaning out of their difficult experiences has been extensively reviewed in existential and humanistic research (e.g., Hoffman, 2009; Schneider, Bugental, & Pierson, 2001; Wong, 2006; Yalom, 1980). Hoffman (2009) stated that “meaning provides a stabilizing and centering effect” (p. 259) during chaotic experiences and believes it to be the “ultimate coping mechanism” (p. 260). The current study supports the notion that creating meaning is central to healing. The findings indicate, however, that it is necessary to balance multiple perspectives when searching for the meaning underlying adverse experiences. These included psychoeducational sources
(i.e., psychology books and therapy) as well as spiritual sources (i.e., religion, meditation, spiritual books, and spiritual teachers). The case study literature shows that individuals often received psychological support following the experience of adverse effects from meditation (Sethi & Barghava, 2010; Yorston, 2001). Those attending mindfulness-based therapies are also often clinical populations who are simultaneously in therapy (e.g., Crane & Williams, 2010). However, the literature shows that individuals often drop out of therapy and return to meditation, despite experiencing adverse effects (Kuijpers et al., 2007; Sethi & Bhargava, 2010; Yorston, 2001). This suggests that psychotherapy alone is insufficient for helping participants fully recover from adverse effects of mindfulness. At the same time, however, the present study found that Buddhist methods are also not recommended as the only form of coping, as adverse effects were often exacerbated from continued engagement in mindfulness. Meditation teachers may interpret adverse effects through their own lens and may not possess the depth of psychological awareness that may be necessary to sufficiently guide all individuals through these experiences (Aronson, 2004). The results of the present study suggest that combining spiritual approaches and psychological approaches is necessary to provide practitioners of mindfulness with a more comprehensive understanding their experience.

Oftentimes, Buddhist perspectives rely on continued meditation, albeit modified and under the guidance of an expert, to manage the arising of negative effects (Buddhaghosa, 1975; Namto, 2011). Contrary to these Buddhist perspectives, the study found that continued meditation following the initial experience of negative effects can worsen them. This is supported by the research literature (Crane & Williams, 2010; Lynch, 2004) on attrition from mindfulness-based interventions, which suggests that individuals may need to stop meditating (i.e., by dropping out of the study) when they experience adverse effects. Nevertheless,
the study found that reincorporating meditation once adverse effects have been stabilized and managed through other means (i.e., social support, physical activity, psychotherapy), can provide a personally-relevant framework to foster a deeper understanding of the experience. Overall, the findings indicate that meditation can be helpful at later stages of meaning-making and integration but may be too disruptive during the initial onset of adverse effects.

The study found that psychological perspectives offered a scientific understanding of the adverse effects. Thus, while Buddhist monks have suggested that an “expert teacher” (p. 8) can help guide practitioners through negative experiences, the results indicate that Buddhist methods alone are insufficient for ameliorating some practitioners’ difficulties. Psychotherapists who held a Buddhist philosophical perspective in addition to their background in psychology were able to facilitate deeper processing of the adverse experience. Psychotherapists who held these multiple viewpoints were able to quickly identify possible sources adverse effects and reframe the experience using both psychological and spiritual perspectives.

Traditional psychotherapeutic methods, like psychoanalytic perspectives for example, are also important for framing the adverse experience and providing meaning. While the present study showed that CBT interventions can be useful for helping practitioners understand the relation between antecedents and consequences of the meditation, analytic perspectives helped to construct deeper meaning out of their experiences. Again, since many Western practitioners of mindfulness use it to deconstruct the psychological self (Engler, 2003; Epstein, 1988), the study found that reconstructing the self was important in order to be able to function in daily life. Analytic and Jungian approaches appeared work counter to meditative practice because they focus on crystallizing experience. The study found that the experience of adverse effects was often integrated using analytic methods because they involve the crea-
tion of personally-relevant meaning to understand unconscious experience (Chodorow, 1999).

Thus, the findings demonstrated that it was important to coalesce disparate thoughts, images, and sensations into a coherent narrative that appealed to the values of the practitioner. Indeed, research shows that if spirituality is important to clients, deeper healing and resilience can only come about by incorporating it into more traditional psychological approaches (Galanter et al., 2007). The findings indicate that meaning creation through spiritually-focused psychotherapy can be helpful for individuals who have experienced adverse effects. Therapists can help clients create a narrative that takes into account the tangible and intangible aspects of the experience, using both spirituality and psycho-education (Wong, 2010) to help them to rebuild the self that was deconstructed through mindfulness.

Adverse Effects of Mindfulness Meditation

The study found that a variety of adverse effects resulted from mindfulness meditation practice. This is consistent with existing literature (e.g., Dobkin et al., 2011; Lustyk et al., 2009; Shapiro 1992a, 1992b) which indicates that practicing mindfulness can lead to difficult experiences. There is conflicting evidence regarding the timing of the emergence of adverse effects with Shapiro (1992a) suggesting that negative experiences increased in intensity and frequency over time, while other sources suggest that difficulties typically arise early in the meditative process (Crane & Williams, 2010; Lynch et al., 2004; Namto, 2011; Perez-de-Albeniz & Holmes, 2000; Vanderkooi, 1997). The present study indicates that most individuals experience adverse effects early in their mindfulness practice, oftentimes during their first sit. Taking into account the context in which these effects arose, it is likely that difficulties emerged quickly due to a lack of preparation, the misrepresentation of mindfulness (i.e., as a wholly positive activity), as well as personality and current life stressors.
Descriptions of adverse effects, though limited, result from a variety of sources (e.g., Crane & Williams, 2010; Kuijpers et al., 2007; Lustyk et al., 2009; Lynch, 2004; Perez-de-Albeniz & Holmes, 2000; Shapiro 1992a, 1992b; Vanderkooi, 1997). These sources include Buddhist monks who broadly suggested that mental contents can emerge with “greater intensity” (Namto, 2011, p. 8) when individuals practice meditation. Case studies and meta-reviews on meditative practices have determined that individuals can experience effects ranging from uncomfortable physical sensations to hallucinations and dissociation (Kuijpers et al., 2007; Lustyk et al., 2009; Perez-de-Albeniz & Holmes, 2000). As the sole study that investigated adverse experiences, Shapiro (1992a) was able to detail a variety of effects that can occur, but the study still lacked a comprehensive contextualization of participants’ experiences. Studies on mindfulness-based interventions (e.g., Crane & Williams, 2010; Lynch, 2004) described experiences of emotional volatility, rumination, and cognitive reactivity, but focused on clinical populations. Clinical observations have indicated that clinical populations that tend to deal with feelings of emptiness may experience panic and dissociation (Didonna & Gonzalez, 2009). Nevertheless, thorough detailing of the adverse effects and their contexts is limited in the literature.

The current study expands upon this research by capturing the nuances of these adverse effects and the context in which they occurred. There are several ways that the study’s findings expand on what is known about the types of adverse effects that can occur during meditation. First, the present study details the physical impacts of mindfulness, including sensory distortions and physiological changes. Perez-de-Albeniz & Holmes (2000) documented experiences of uncomfortable physical sensations, however, details of these sensations were scant and the present study offers a richer account of the range of physical experi-
ences that can occur during and following mindfulness meditation. Sensory sensitivity and distortions in auditory and visual domains have not been accounted for in previous literature. These effects were most often a result of participation in mindfulness retreats, likely due to the reduced stimulation of these environments. According to the study’s findings, retreats often limit social interaction, conversation, and activities. When individuals leave this restricted retreat environment, the activity and noise of the outside world may appear particularly intense in comparison. Research on sensory deprivation found that normal subjects may begin to experience distortions, sensitivity, and hallucinations when they are secluded for an extended period of time (Brownfield, 1965). Thus, it appears possible that retreat environments along with prolonged meditation, produce similarly isolating effects as actual seclusion.

The extant literature also lacks descriptions of the range of internal physiological changes that can occur. The study found that individuals can experience physiological responses to meditation, expanding on previous research (Perez-de-Albeniz & Holmes, 2000; Shapiro, 1992a, 1992b). Some of these physiological responses could be attributed to panic and anxiety, but there were also strange, unexplainable internal effects. Research on mindfulness-based interventions (Crane & Williams, 2010; Lustyk et al., 2009; Lynch, 2004) suggests that, for some people, mindfulness can intensify the same effects that it was meant to reduce. The present study supports these findings by showing that physiological changes tend to increase symptoms of anxiety. Physiological changes can trigger a negative feedback loop which exacerbates anxiety, a common occurrence in people who are prone to anxiety and panic (Steimer, 2002).
Related to this, Shapiro (1992a) also suggested that relaxation-induced panic and anxiety can occur during mindfulness practice because it tends to produce feelings of relaxation. Research shows that relaxation-induced panic may be due to fear of losing control (Adler, Craske, & Barlow, 1987). The present study extends Shapiro’s (1992a) research by showing that relaxation-induced panic was a very common experience, especially in first-time meditators. The findings also indicate that panic was the most frequently recurring adverse effect of mindfulness meditation.

The current study also expands on what is known about the psychological material that emerges during mindfulness meditation. Crane and Williams (2010) suggested that a common effect of mindfulness is the derepression of psychological material. Indeed, the goal of vipassana meditation is to broaden the field of awareness so aspects of the self and world become illuminated. However, DelMonte (1987) and Buddhist monks (Buddaghosa, 1975; Namto, 2011) acknowledge that this emergence can be overwhelming if it is not approached with deliberate care. Practitioners of mindfulness should approach the practice slowly, in a stepwise process, with an experienced guide to attenuate the emergence of psychic material (Namto, 2011). Namto (2011) stressed that mindfulness can be “dangerous” (p. 8) when repressed or ignored mental contents return with “greater intensity” (p. 8). This occurs when vipassana practice is undertaken too early (Namto, 2011). The current study found that the observations of Buddhist monks (Buddaghosa, 1975; Namto, 2011) were accurate, with many participants being overwhelmed by the contents of their unconscious due to their inexperience, lack of preparation, and inadequate support.

Perez-de-Albeniz and Holmes’ (2000) meta-review documented the types of content that can emerge, including practitioners’ experiences with hallucinations, anxiety, and de-
pression following meditation. Shapiro (1992a) described the emergence of anxiety, depression, and self-critical thoughts. Crane & Williams (2010) also suggested that difficult thoughts, feelings, and memories may be lingering under the surface and triggered by meditative practices. However, they focused on a sample of suicidal patients dealing with clinically-significant issues with rumination and cognitive avoidance. The present study suggests that the sudden emergence of psychic material can also occur for normal practitioners of mindfulness, supporting Perez-de-Albeniz and Holmes (2000) and Shapiro (1992a). This occurs because a general effect of mindfulness is that it relaxes “cognitive controls” (Germer et al., 2016, p.128). Due to the overwhelming nature of this emergence, however, many found it difficult to cope. Confirming Crane and Williams’ (2010) research and Welwood's (2000) scholarly work, most participants commented on their tendency to either unconsciously avoid or actively repress their internal experience. Thus, the current study found that because participants had been actively avoiding their experience, once controls were loosened, they became flooded with repressed psychological material.

The psychological material that emerged included fear, childhood trauma, negative memories, as well as sadness and anxiety. The literature (e.g., Lynch, 2004) broadly discussed practitioners’ emotional reactions, while failing to thoroughly detail nuances or contextualize the experience. Vanderkooi (1997) also suggested that anxiety can emerge, but his study relied on the observations of Buddhist monks. The current study indicated that fear was a prevalent emotion, manifesting in different forms and degrees of intensity. This fear often emerged during or soon after meditation practice. Fear manifested cognitively and as physical sensations in the body. Observations from Buddhist monks suggest that weak concentrative abilities can lead to the mind being overwhelmed by the content that emerges during
vipassana practice (Namto, 2011). It is possible that a lack of control over the content that arises and pace of the emergence may create feelings of fear. The predominance of fear could also be due to unresolved psychological issues or life transitions that many were dealing with when they engaged in mindfulness practice.

The present study also provides a clearer picture of the types of images that can surface in practitioners. Often these images were related to fear and tended to be violent and sexually-charged. The current study suggests that mindfulness can trigger the re-experiencing of traumatic events. The traumatic memories that emerged were also related to past experiences of fear (e.g., neglect and emotional and physical abuse). The literature on adverse effects in meditation does not thoroughly detail the re-experiencing of trauma that can occur through mindfulness meditation, but Germer (2009) acknowledged that it can be harmful if individuals are reliving past trauma. Some studies on post-traumatic stress disorder show that mindfulness can be risky for this population even with a modified practice (Lustyk et al., 2009). In line with previous research, another common emotion that emerged was sadness. Mindfulness can often lead to participants feeling worse due to the hyper-focus on their internal experience (Wells, 2002). Again, individuals can become aware of repressed or avoided emotions through mindfulness (Crane & Williams, 2010) and may become aware of their feelings of sadness. Many participants were in a period of transition in their lives and dealing with a lot of change and stress, which may likely explain the predominance of fear and sadness in the sample.

Changes to the experience of self and world also occurred following mindfulness meditation. Similar effects have been documented in previous literature including dissociation (Perez-de-Albeniz & Holmes, 2000), self-related confusion, self-critical thoughts, and
issues with reality-testing (Shapiro, 1992a as cited in Mace, 2008). However, these terms lack contextualization. The present study suggests that practitioners’ experience of dissociation, depersonalization, self-related confusion, and issues with reality testing may be due to a visceral experience of the Buddhist concept of the ‘empty self’. Again, the Buddhist perspective understands the self as diffuse and interconnected with the wider world. Mindfulness practice seeks to dismantle the notion of a stable, coherent, unchanging self in order to cease suffering (Buddhaghosa, 1975). Thus, the goal of mindfulness is to disrupt the foundations of the self, an experience that can be uncomfortable for many. The deconstructive nature of mindfulness has been discussed by scholars and Buddhist monks alike (Engler, 2003; Namto, 2011). The present study shows that mindfulness can dramatically shift one’s sense of self in complex ways. Adverse effects related to the self include a loss of interest in previously enjoyable activities; loss of agency and desire to “be somebody”; loss of a normal experience of one’s bodies; and loss of the boundary between the self and the world. The study found that significant changes to the experience of the self made it difficult to function in daily life, hold a job, and maintain relationships.

These experiences may have been particularly uncomfortable due to the high value placed on individualism in the West (Ogihara & Uchida, 2014). This indicates that the goals of mindfulness may be discordant with Western values. Mindfulness works contrary to deeply-held Western goals of building a stable self and identity in order to achieve wellness (Triandis, 1995). Panic was often a symptom of this loss of sense of self. The present study suggests that East Asian cultural values may attenuate these particular adverse experiences because of their emphasis on interconnection and community (Triandis, 1995). Though several participants explicitly desired to experience emptiness and enlightenment, they still found the
actual experience of it to be profoundly disorienting. Unfortunately, for the most part Western society lacks a forum where individuals can live their daily lives in collectivistic manner (Triandis, 1995). Several scholars have suggested that there is a tension between Eastern and Western values and that the goals of mindfulness may not be ideal for those living in Western society (Aronson, 2004; Walsh & Shapiro, 2006). The results of the study provide evidence to support these views and expand upon what is known about how Westerners practice mindfulness.

**Integrated Model of Adverse Experiences in Mindfulness Meditation**

The study demonstrates that individual experiences with the adverse effects of mindfulness meditation are dependent on individual and sociocultural factors and recovery is managed through a variety of coping methods. The model captures the progression individuals make when experiencing adverse effects by describing the antecedents and consequences of the experience.

The model consists of four levels that are unidirectionally and bidirectionally connected. The first level represents the factors contributing to the experience of adverse effects in mindfulness. Individual factors capture the main factors that contribute to the experience of adverse effects including: personality and personal history, life transitions, and expectations. The notion that personality and expectations can influence mindfulness meditation practice has been suggested by a number of scholars (Crane & Williams, 2010; Engler, 2003; Namto, 2011; Suler, 1993; Welwood, 2000). The current study found that several aspects of personality and personal history were implicated in the experience of adverse effects including traumatic experiences; a rigid, focused, and perfectionistic personality style; the tendency to avoid experience; a lack of meditation experience; and a lack of psychological awareness. When people expect mindfulness to help them achieve relaxation and peace, enlightenment,
clarity regarding their personal problems, or to avoid them, difficulties tend to ensue especially in combination with other individual factors. The issue of life transitions on the meditative experience was briefly discussed by Kuijpers et al. (2007) in their case study. The present study found that changes in jobs, relationships, housing, and identity leads to increased stress, confusion and vulnerability. These individual factors increase the likelihood that adverse effects will occur, but are also dependent on the sociocultural contexts surrounding the practice.

Sociocultural factors capture the broader contexts that give rise to participants’ adverse experiences including: teaching factors, environmental factors, and cultural factors. Teaching factors refer to the characteristics of teachers that can influence the onset and maintenance of adverse effects, as previously discussed by several scholars (Aronson, 2004; Buddhaghosa, 1975; Namto, 2011). The current study found that meditation teachers’ training and experience, psychological awareness, cultural differences, and level of support contribute to adverse effects by exacerbating or attenuating the experience. The study also found that environmental factors like long practices, reduced food and sleep, social isolation, and in general, the vipassana retreat setting made it more likely that individuals would experience adverse effects from their mindfulness practice, similar to previous case study findings (e.g., Kuijpers et al., 2007; Sethi & Bhargava, 2010; Walshe & Roche, 1979). Cultural values inherent to mindfulness practice were also implicated, especially conflicting notions of the self and wellness (Aronson, 2004; Engler, 2003; Triandis, 1995). When combined, these individual and sociocultural factors increase the likelihood of experiencing adverse effects.

The adverse effects of mindfulness meditation capture the main adverse effects that were experienced by participants. These main effects include panic, emotional upwelling,
negative memories, sensory sensitivity and distortions, physiological responses, changes to the experience of the self and world, loss of conceptual map, and social isolation, expanding on the findings of previous research (e.g., Crane & Williams, 2010; Lustyk et al., 2009; Perez-de-Albeniz & Holmes, 2000; Shapiro, 1992a, 1992b). Experiencing adverse effects led all participants to attempt to cope with the experience in various ways.

Coping methods are bidirectionally connected to adverse effects, indicating that many still experience adverse effects following their attempts to cope. The types of adverse effects participants’ experienced also led to using different types of coping strategies. Individuals’ used various methods of coping including social support, physical activity, increasing psychological awareness, and creating meaning frameworks. These coping methods have been extensively reviewed in psychological research (e.g., Cohen & Wills, 1985; Gaiswinkler & Unterrainer, 2016; Galanter et al., 2007; Kim & McKenzie, 2014; Salmon, Lush, Jablonski, & Sephton, 2009; Scully et al., 1998; Theoits, 1986; Van der Kolk, 2006; Wong, 2010), but have not been applied to coping with the effects of mindfulness meditation. Beyond psychological approaches, Buddhist monks (Buddhaghosa, 1975; Namto, 2011; Thera, 1998) have suggested that adverse effects can be managed through continued meditation with the help of experienced teachers. However, the current study suggests that while this can be beneficial at later stages of recovery, the psychological methods described above first need to be implemented in order to stabilize the experience. Participants then moved to the resolution phase, which refers to recovery or the decision to cease meditation practice.

Coping with the experience is bidirectionally connected to recovery indicating that recovery is not linear, often requiring time and several attempts to manage the adverse effects to achieve stability and understanding. Recovery was often characterized by emotional and
psychological stability and integration, psychological awareness, and continued use of self-care activities. Most participants who achieved recovery often returned to practice mindfulness meditation regularly. Many of them found that it was an essential part of their full recovery as it provided deeper insight and offered a perspective that resonated with them (Galanter et al., 2007).

Some participants were unable to recover from the adverse effects and ceased meditation practice, even after several attempts at coping with the experience. The decision to cease meditation is unidirectionally connected to both adverse effects and coping methods. This indicates that some participants cease meditation immediately following the experience of adverse effects. Others participants tried to cope with their difficulties but after repeated failures, they also decided to stop meditation due to having difficulty maintaining stability. The decision to cease meditation following adverse effects has been previously implied by attrition rates in studies on mindfulness-based interventions (e.g., Crane & Williams, 2010; Lynch, 2004). In summary, this model captures the progression that individuals make when experiencing adverse effects including the contributing contexts, effects, and methods of coping, resulting in a meaningful resolution or the decision to refrain from further mindfulness practice.

Summary

Overall, the results support the literature in stating that mindfulness meditation practices can trigger a range of adverse experiences. The present study furthers what is known about the nature of adverse effects by documenting the different types of content that can arise as well as their relationship to contextual factors. Ultimately, it appears that the combination of a lack of control over the sudden upwelling, failures in support, and lacking a framework to understand the content exacerbated participants’ difficulties. Participants felt
blindsided by the adverse effects they experienced due to the glowing narrative surrounding mindfulness. They had high expectations that mindfulness would help them to quickly fix their problems and elicit feelings of peace and stability. However, all participants had experiences that were far from these expectations. Nevertheless, it appears that these side effects can be attenuated by adequate preparation, psychological awareness, and responsive support. Once participants were stabilized through these means, many often returned to mindfulness practice. It is clear that the discourse surrounding mindfulness meditation needs to become more nuanced so that potential meditators are informed of the possible side-effects of practicing meditation.
Figure 1: Model of adverse experiences in mindfulness meditation
Chapter Six: Conclusion

The present study sought to investigate individual experiences with the adverse effects of mindfulness meditation, the contexts underlying the practice, and methods of coping with the effects. The study used a qualitative design involving in-depth, semi-structured interviews with eight participants to understand the experience and their contexts. A grounded theory approach was used to organize and analyze participants’ narratives. The findings suggest that the adverse effects of mindfulness meditation arise in particular individual and sociocultural contexts. These contexts included individual personality differences and personal history, life transitions, and expectations related to mindfulness practice. Sociocultural contexts like teaching styles, cultural tensions, and immediate environmental factors also tended to increase the likelihood that adverse effects would be experienced. The study also investigated how these experiences were coped with, challenging the notion that mindfulness is a coping method in and of itself. Overall, the study expanded upon what is known about the types of adverse effects that can occur and their relation to these contexts.

Thus, the present chapter will explore the implications of the results of the study on counselling and research. First, the chapter will discuss how practitioners can implement the findings in their work with practitioners of mindfulness who have experienced difficulties. Next, the chapter will outline the limitations of the study and briefly recommend potential future directions.

Clinical Recommendations

The results of the study suggest several ways counsellors can assist practitioners of mindfulness who have experienced adverse effects. Counsellors have a role in preparing and supporting individuals who have decide to undertake mindfulness meditation practice. They are also essential for helping these individuals recover from adverse effects. Overall, counsel-
lors can provide a safe, non-judgemental space for practitioners to process their experience in mindfulness meditation.

Counsellors can prepare practitioners for mindfulness in several ways. First, they can help identify potential issues in their clients’ lives that may lead to an increased likelihood of experiencing adverse effects. Counsellors should also be familiar with works by Germer et al. (2016) and Shapiro (1994), which offer suggestions on the types of clients who should refrain from practice. The results of the present study also suggest several indicators that a client may experience adverse effects including those who lack psychological awareness and possess a tendency to actively avoid experience; those who are experiencing a life transition; trauma; and a rigid, focused and perfectionistic personality style. Psychology’s focus on building cognitive and emotional strength can be useful for preparing and supporting individuals in their mindfulness practice, especially when negative experiences arise. While Buddhist monks have accounted for these understandings through their own methods of teaching and practicing mindfulness, they lack a thorough grasp of psychological disturbances and their potential consequences (Aronson, 2004; Engler, 2003; Namto, 2011). Counsellors need to be aware of their client’s motivations and expectations for mindfulness practice so that clients are prepared for possible side-effects. If counsellors intend on using mindfulness within their practice, they need to be cognizant of potential difficulties and how to quickly respond to them. The results of the study suggest several ways that counsellors can respond to practitioners who have experienced adverse effects.

Basic therapeutic interventions like empathy and developing a strong therapeutic alliance can lay the foundation for clients’ further recovery. Holding a space for clients to share their difficult experiences is essential for healing to take place. Participants felt the need to be
heard and non-judgmentally supported as they processed their difficulties. While these are essential elements of therapy, deeper support can be provided in other ways.

The study’s findings indicate that receiving support from individuals who possess a balanced perspective is vital for participants’ recovery and growth. Many participants indicated that counsellors who possessed knowledge of a variety of psychotherapeutic modalities and spiritual perspectives, helped them to integrate their difficult experiences in a manner that was personally meaningful. Research shows that if spiritual perspectives are important to the client, refraining from incorporating them into therapy can hinder clients’ full, comprehensive recovery (Galanter et al., 2007). Consistent with this research, the findings of the present study suggest that to be most effective in helping clients’ process their experience, counsellors will need to develop an awareness of the spiritual, existential frameworks that clients may use to understand their experience.

The results also suggest particular psychotherapeutic modalities that can be helpful for different types of disturbances and during different phases of recovery. For those who experienced panic and anxiety, CBT helped clients develop psychological awareness around their triggers. Once these effects were stabilized, deeper existential concerns were effectively processed through analytic and Gestaltian approaches, like Jungian analytic therapy and the voice-dialogue model. Of course, if counsellors are not familiar with these methods, they need to be able to identify clients that would benefit from deeper psychological processing and refer accordingly.

Counsellors can also encourage clients to maintain other self-caring, supportive activities that help facilitate mind-body integration. These activities can include, but are not limited to, yoga, dancing, and different forms of exercise. They can also suggest that clients lim-
it their meditation practice once adverse effects become apparent, so that their mental health does not deteriorate.

**Limitations**

While a qualitative design offers several benefits that have been outlined above, there are also aspects of it that limit the conclusions that can be made. First, the sample size (n=8) of the present study is relatively small. While the size of the sample facilitated the study’s goal of an in-depth exploration of adverse effects of mindfulness meditation, it limits the generalizability of the findings. The sample was varied in terms of age, religion, and ethnicity due to the population make-up of Toronto, therefore the dichotomy between Eastern and Western practitioners of mindfulness were over-generalized. Next, the snowball sampling style meant that participants were drawn from groups around the city where individuals who have had adverse experiences tended to congregate. Thus, their experiences may not be generalizable to other practitioners of mindfulness.

The study is also limited by the researcher’s own biases and experiences. These biases could have influenced decisions regarding the themes that were identified and the particular emphasis of the results. The researcher made efforts to limit subjectivity including sending participants’ the themes that were identified so they could provide feedback; maintaining a journal to record thoughts and emotions that arose during the course of the interview and data analysis; rigorously staying close to the interview data when using the constant comparison method to create themes; and using participants’ own language to reflect the themes. Quantitative methods can be used to support the results of the present study.

**Future Directions**

The present study’s process-based, qualitative approach to inquiry provides a wealth of information on the adverse effects of mindfulness meditation as well as coping strategies
used to deal with these effects. This research method was also able to implicate several contextual factors that relate to the consequences of mindfulness practice. While a few studies have acknowledged the difficulties that can arise from mindfulness practice, even less have explored the nature of these effects. Westerner’s practice of mindfulness is far more complex than previously understood and this highlights the need for more qualitative research.

Currently, there remain several unanswered questions that further quantitative inquiry can help to elucidate. Overall, the qualitative nature of the study was unable to determine correlations that would indicate whether certain contexts in fact contribute to the experience of adverse effects. For example, while life transitions appeared to play a large role in increasing likelihood of experiencing adverse effects, many individuals who take on mindfulness may engage in the practice precisely because they are dealing with difficulties in their lives. Thus, this would require a control group to determine whether life transitions have a significant impact on experiencing adverse effects. Regarding personality factors, research would benefit from administering personality assessments to larger samples of practitioners to determine differences in those who experience adverse effects and those who do not. Also, it is unclear what the differences are between those who return to mindfulness and those who refrain. The study was also unable to determine why adverse effects persist and debilitate some practitioners for several years after, despite refraining from practice. While the present study was able to determine that there are cultural tensions present in Westerners who practice mindfulness, it was unable to identify the differences between Eastern and Western practitioners. Further studies can use a quantitative approach that utilizes a comparison or control group, to determine whether any of the adverse effects are unique to particular groups.
Concluding Remarks

Mindfulness is a growing field that has challenged and broadened the Western biomedical model of care. Mindfulness practices have proven to be effective by offering alternate strategies to deal with a variety of psychological and medical issues. Nevertheless, like most psychological interventions, mindfulness is not without its own issues. It will be important to develop an understanding that mindfulness is a rich and complex practice that has positive and negative attributes and may not be suitable for all types of people. The adverse effects and the contexts relating to mindfulness practice that have been outlined in this study need to be further investigated. However, if these issues are addressed, mindfulness meditation will continue to flourish as part of a new model of care.
References


Appendices

Appendix A: Study Recruitment Announcement

My name is Sabina Pillai and I am a graduate student in Clinical/Counselling Psychology at the Ontario Institute for Studies in Education (OISE), University of Toronto. For my master’s thesis, I am conducting research on individual experiences with the adverse effects of mindfulness. Preliminary research and anecdotal evidence suggests that individuals are experiencing distressing effects from their mindfulness practice. However, we know very little about the nature of these experiences and why people are having them. I am interested in exploring individual experiences with adverse effects in order to better understand mindfulness’ potential to elicit distressing experiences for some people.

I am seeking out individuals who have experienced adverse effects through mindfulness and would like to participate in this research project. This would involve volunteering for a 60-90 minute interview to discuss your personal experience with the adverse effects elicited by mindfulness practice. For this study, I am looking for people who have practiced mindfulness for at least a year who have experienced effects that they consider distressing or traumatic within the last 2 years of their mindfulness practice. To qualify for this study, participants must also 1) live in Canada 2) have no diagnosed severe mental illness and 3) be willing to speak openly about their experiences. If you are interested in participating, I would be happy to provide you with more information. You can contact me at sabina.pillai@mail.utoronto.ca. Finally, if you yourself are not interested in participating or don’t fit the description I provided, but know someone else who might be interested, please feel free to pass on my contact information to them. Thank you for your time.
Appendix B: Information Letter

My name is Sabina Pillai and I am a graduate student in Clinical/Counselling Psychology at the Ontario Institute for Studies in Education (OISE), University of Toronto. I would like to invite you to participate in a study that I am conducting with individuals who have experienced adverse effects through mindfulness practice. This study is supervised by OISE professor, Dr. Roy Moodley, and will partially fulfill my masters requirements.

WHAT IS THIS STUDY ABOUT?

I am conducting a study to examine the adverse effects elicited by mindfulness meditative practices. While research shows that mindfulness meditation has been beneficial for a large number of people dealing with a variety of issues, to date there have been no studies directly examining the potential for it to lead to distressing experiences. While it is known that intensive, retreat-based settings can elicit these experiences for some people, it is not known why mindfulness causes these experiences in less intensive settings. Preliminary research on mindfulness-based interventions show that individuals are having difficulty attending and completing these programs due to difficult experiences. Since we know very little about the nature of these experiences and why adverse effects occur, I am interested in exploring individual experiences with them in order to better understand what appears to be a common, but misunderstood experience. I hope that the findings of this study will encourage awareness and understanding among mental health professionals working with practitioners of mindfulness meditation in addition to influencing how mindfulness is disseminated and consumed.

In this study, I will conduct interviews with 10-12 individuals who have experienced adverse effects in their mindfulness meditation practice. Furthermore, I want to understand what the individual and sociocultural factors surrounding these experiences as well as the impact of the adverse effects and ways of coping.

For the interview, I am looking for individuals who:

1. **Have had difficult experiences through mindfulness meditation practice.**
2. **Have practiced mindfulness meditation for at least a year and no more than 5 years.**
3. **Do not have a diagnosis of a severe mental illness nor currently abusing substances.**
4. **Comfortable speaking candidly about their experiences in some depth.**
5. **Currently reside in the Greater Toronto Area.**

WHAT WILL I BE ASKED TO DO?

You will be asked to participate in an interview that lasts approximately 60-90 minutes. It would be good to set aside two hours if possible, to account for the informed consent process and debriefing after the interview. However, I will respect necessary time constraints.

In the interview I will ask you to speak broadly about the adverse effects you have experienced through your engagement in mindfulness meditation. I will begin by asking you to tell your story of your experiences with mindfulness meditation. Then I will ask you to reflect in
more detail on the adverse effects you have experienced and how you have coped with them. The interview will be audio taped.

About 3 or 4 months after the interview, you will have an opportunity to provide feedback regarding the content of our interview. I will contact you in the manner you specify in the consent form (email or Canada Post) with the findings of this research (my summary of your interview, as well as a collection of themes generated from all the interviews describing your experience of adverse effects from mindfulness meditation). You will be asked to provide your feedback on the findings. This feedback will be incorporated into the final report.

DO I HAVE TO PARTICIPATE?

Your participation in this research is completely voluntary. You may refuse to participate at any time, decline to answer any questions, and even withdraw during the course of the interview without any negative consequences. You may withdraw from the study at any time up until the final stage of analysis. I will notify you of this deadline at least two weeks before it occurs.

ARE THERE ANY RISKS AND/OR BENEFITS TO PARTICIPATING?

During the interview, you may choose to share some sensitive information that elicits difficult feelings and memories. This has the potential to be emotionally upsetting, which is the only foreseeable risk associated with your participation in this research. If, at any point, you wish to take a break, change topics, or stop the interview, you may do so without any negative consequences. Once the interview is complete, I will guide you through a debriefing process during which you will have the opportunity to discuss your experience of the interview.

Your participation in the research may have the following benefits:

• Sharing your experience of mindfulness meditation can help to illuminate the complexity of the practice and provide a richer picture of mindfulness compared to current popular understandings.

• Understanding how people are unique in relating to mindfulness practice could help clinicians in supporting the specific needs and circumstances of each client.

• Some individuals may find that they have experienced new insights related to talking about their experience of the negative effects of mindfulness.

COMPENSATION

Compensation of $10 will be provided to individuals who participate in the interview.

WHAT WILL HAPPEN TO THE INFORMATION AFTER I HAVE PARTICIPATED IN THE STUDY?

All of the information collected as a result of your participation in this study will remain strictly confidential; you will be referred to by a pseudonym in all transcripts and analyses,
and all other identifying details will be disguised. The data collected in the course of this research may be used for publication in journals or books, and/or for public presentations, but if you so choose, your identity not be revealed under any circumstances. The data will be retained for a period of seven years by Dr. Roy Moodley, and will be kept in a secure location at the University of Toronto. It will be accessible only to the principal investigator (Sabina Pillai) and her supervisor (Dr. Roy Moodley). The tape recordings will be erased within two months of transcription.

If you would like a copy of the results of this research when it is available, we would be very happy to offer it to you. If so, please fill in your name and mailing or email address on the consent form.

If you have any questions about your rights as a participant, you may contact the Research Ethics Review Office by e-mail (ethics.review@utoronto.ca) or phone (416-946-3273).

If you have any questions about the study please feel free to contact me or my supervisor, Dr. Roy Moodley. Thank you for considering participating in this research.

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OISE, University of Toronto Counselling Psychology  
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Toronto, ON, M5S 1V6  
(416) 923-6641 x. 2564  
Email: roy.moodley@utoronto.ca
Appendix C: Consent Form

If there is anything you do not understand about the information letter or this consent form, please speak to the researcher.

1. Volunteer’s declaration of informed consent

I have been given a written explanation of the study by the investigator (Sabina Pillai), including full details of any potential psychological risks and what participation entails. I have been given the opportunity to ask questions. I have had enough time to think about the study, and to decide without pressure if I want to take part. I am free to answer some questions and not others, and I can withdraw from the study at any time up until completion of the final analyses (and I will be given at least 2 weeks’ notice of that deadline). I have been assured that all information collected in the study will be held in confidence. I understand that the only instance in which confidence would be broken would be if I were to share information suggesting that I may be at risk of harming myself or others, or if a child is potentially being abused (due to legal requirements).

1. Contact information and request for research summary

☐ I am willing to receive a copy of the transcript and preliminary analysis of my interview with the opportunity to provide feedback.

I would like to receive a copy of the completed study.

Please send me the above item(s) by:  E-mail
  Canada Post

Address: __________________________________________________________

and Province: ____________________________ Postal Code: ____________________________ E-

mail address: __________________________________________________________

2. Signature

I have received a copy of the Information Letter and Consent Form, and have had all my questions about this study answered to my satisfaction.

I agree that I will participate in this study.

Name: ____________________________ Signature: ____________________________ Date: ____________________________
Appendix D: Demographics Form

Demographic Form

Desired pseudonym: ________________________________________________

Age: _____________________________________________________________

Occupation: _______________________________________________________

Level of education: __________________________________________________

Relationship Status: _______________________________________________

Current religious or spiritual affiliation(s): _____________________________

Years of Mindfulness Practice: ______________________________________
Appendix E: Semi-Structured Interview Guide

Introduction
I am interested in your difficult experiences with mindfulness meditation. I would particularly like to hear your thought process, feelings, and expectations relating to what you experienced through this practice.

Questions
1) Could you tell me about the adverse effects that you experienced?
   A. When did you begin experiencing distressing effects from mindfulness meditation?
   B. How long had it been since you began your mindfulness practice?
   C. Could you tell me, in as much detail as you would like, if any significant or relevant events occurred prior to or around the time you began to experience these effects?
   D. Have you had any experiences with these issues prior to or outside your mindfulness practice?
2) Would you be able to describe how you were practicing mindfulness meditation when you began experiencing adverse effects?
   A. How were you taught to practice mindfulness?
   B. Do you practice mindfulness alone or in a group setting?
   C. Were you practicing mindfulness with a teacher?
   D. What were your expectations before engaging in mindfulness meditation?
   E. What was your understanding of the concept and practice of mindfulness before and after these experiences?
3) How did you first cope with these distressing experiences?
   A. How did you make sense of the difficult thoughts/feelings/memories/images/sensations that arose?
   B. What was the impact of these effects on your life/relationships/sense of self/health?
   C. Did you seek any social support?
   D. Do you still practice mindfulness? If Yes/No, Why?
4) Debrief: Is there anything else you would like to tell me about your experience that we did not cover during the interview?
A. What was it like for you speak to me about your difficult experiences with mindfulness meditation
B. Is there anything I could have changed or done differently in the interview?
Appendix F: Counselling Resources

Adult Counselling and Psychotherapy Centers:

OISE Psychology Clinic
416-978-0654
http://www.oise.utoronto.ca/psychservices/

Family Service Toronto Counselling Services
416-595-9618
http://www.familyservicetoronto.org/programs/counselling.html
Drop-in counselling: Wednesday 4-8pm

Counselling and Psychological Services (University of Toronto students only)
416-978-8070
http://caps.utoronto.ca/main.htm

Toronto Therapy Network
647-723-5274
http://therapytoronto.ca/

Crisis Centers and Distress Lines:

Toronto Distress Centre
416 408 4357
https://torontodistresscentre.com/

Gerstein Centre
416-929-5200
http://www.gersteincentre.org/

Saint Elizabeth Health Care - Community Crisis Response Program
416-498-0043
http://www.saintelizabeth.com/Services-and-Programs/Services-for-Communities/Crisis-Intervention.aspx