

ABSTRACT

Title of Dissertation: EXERCISE IS MEDICINE? A CRITICAL
EXAMINATION OF THE PROMOTION OF
EXERCISE FOR MENTAL HEALTHCARE

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Increasingly, physical activity is being promoted as a way to prevent or treat a range of chronic health conditions, including mental illness. In this dissertation, I utilize an ecological framework and draw upon feminist theories to explore why it is that physical activity is being used as a form of (mental health) therapy in this current moment, as well as the benefits and shortcomings of physical activity in preventing or treating mental illness. In particular, I focus on the ways in which gendered discourses and norms shape the physical activity experiences of women with mental illness. The project entails three separate, yet related, phases: **1)** Extensive review of popular and academic literature to contextualize the “exercise is medicine” movement; **2)** Assessment of the American College of Sports Medicine and American Medical Association’s “Exercise is Medicine” initiative; and **3)** In-depth qualitative interviews with women with obsessive compulsive disorder (OCD).

The results of my three empirical examinations suggest that physical activity can be a beneficial form of mental health treatment, or a valued part of one's life and identity more generally. However, too often the limits to physical activity's effectiveness in treating particular mental illnesses is downplayed, as is attention to the potential harms that can come from being physically active. At times, exercise is even positioned as a "cure", or superior to psychopharmaceuticals in treating mental illnesses, such as depression. Such enthusiasm toward exercise's potential therapeutic value can be seen to be, in part, the result of the current neoliberal, healthist moment in which individual responsibility, hard work, and natural remedies are valued over that which is considered easy, quick, or synthetic (Crawford, 1980, Lupton, 1995, Fullagar, 2017). This is not to suggest that physical activity cannot play a vital role in helping people with mental illness, but better messages and more resources are needed to make it accessible, safe, and meaningful to this population. I conclude the dissertation by providing suggestions as to how this can be accomplished.

EXERCISE IS MEDICINE? A CRITICAL EXAMINATION OF THE
PROMOTION OF EXERCISE FOR MENTAL HEALTHCARE

by

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Dedication

To Grandma Bendavine: While you could not stay to see this project to completion, your love and support laid the foundation that made it possible.

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Table of Contents

Dedication	ii
Acknowledgements	iii
Table of Contents	vii
List of Figures	ix
Chapter 1: Introduction	1
My Research Journey	1
Research Aims and Significance	4
Research Questions	6
Overview of Dissertation	7
Chapter 2: Review of Literature	10
Theoretical Framings of Women, (Mental) Health, and Physical Activity	10
Substantive Literature Review: Situating Exercise in the Treatment of Mental Illness	27
Chapter 3: Methods	55
1. Exercise is Medicine: Dominant Discourse Analysis	57
2. Exercise is Medicine Website Analysis	62
3. The Exercise Experiences of Women with Obsessive-Compulsive Disorder	64
Ethical Issues	72
Reflexivity	75
Chapter 4: Exercise is Medicine: Dominant Discourse Analysis	79
Dominant Narratives: What are They and Why Does it Matter?	80
Why is Exercise Promoted as a Mental Health Treatment?	101
Conclusion	124
Chapter 5: Exercise is Medicine Website Analysis	127
Situating the EIM Initiative	129
Findings and Discussion	135
Conclusion	161
Chapter 6: The Exercise Experiences of Women with Obsessive-Compulsive Disorder	165
Obsessive-Compulsive Disorder and Physical Activity Overview	165
Results	169
Discussion	190
Conclusion	197
Chapter 7: Conclusion	199
Better Messaging	200
Programming	203
Training and Resources	205
Advocacy and Activism	208
Future Research	209
Appendix A	215
Appendix B	218
Appendix C	220
Appendix D	221

Appendix E	224
Appendix F.....	227
Footnotes.....	228
Chapter 1: Introduction.....	228
Chapter 2: Review of Literature	228
Chapter 3: Methods.....	230
Chapter 4: Exercise is Medicine: Dominant Discourse Identification.....	231
Chapter 5: Exercise Is Medicine Website Analysis	233
Chapter 6: The Exercise Experiences of Women with Obsessive-Compulsive Disorder.....	235
Chapter 7: Conclusion.....	235
Resources	238

List of Figures

Figure 1: “Fitspiration” found on the Tumblr blog, *Reasons to be Fit* (2011a).....86

Figure 2: Meme denigrating psychopharmaceuticals (Prozac) posted on the
Facebook page of TruthTheory.com.....90

Figure 3: Meme created in response to the meme in Figure 2 (Rose, 2016).....91

Chapter 1: Introduction

My Research Journey

“If only we could get more people to exercise, it could cure their depression.”

It was my first semester in the kinesiology doctoral program when a fellow classmate made that strong proclamation. She was not alone. Our class was discussing the health benefits of physical activity, and a handful of students were convinced that physical activity was the “solution” to what, in some cases, are intractable chronic disorders: heart disease, depression, anxiety, and so on. The discussion was dripping with self-righteousness and morality. People are too lazy. Too obese. Too quick to take medication instead of work out. Drains on the healthcare system.

Less than three years prior, I was a social work intern in the behavioral health unit of a hospital located in an impoverished urban area. I saw firsthand the difficulties people with severe mental illnesses had getting their basic needs met; not due to personal failures, but a broken system: A government that would more readily build—or outsource— a prison than a community mental health clinic; a government that spends billions of dollars on the military, but only a fraction on research and programming focused on mental illness. As an intern, I worked to find appropriate housing and care for the patients, only to see many of them return weeks, or even days, later—that is, if they were able to leave at all. For people with the most severe symptoms, there was often no place for them to go. All the physical activity in the world could not “cure” these individuals, many of whom were struggling to survive.

My kinesiology peers, unfortunately, are not alone with their overselling of exercise. News headlines urge people to take a stroll in the park instead of a trip to the

pharmacy. Magazine covers announce that exercise is a cure for depression, while book chapters ask readers to “take a park, not a pill”. Exercise is described as “medicine”, “a miracle drug”, or a “miracle cure” by a variety of governmental and non-profit organizations. The rhetoric is sensational and simplistic, if not dangerous. For instance, as exemplified by the “take a park, not a pill” headline, too often messages promoting physical activity juxtapose it with pharmaceuticals. Though it is undeniable that pharmaceutical companies have a powerful influence on healthcare in America and abroad, and pills may be too readily prescribed, nonetheless, for many, psychopharmaceuticals are lifesaving. The valorization of physical activity as a form of treatment, and the simultaneous denigration of pharmacological options is not surprising given many Western nation’s strong emphasis on the Protestant work ethic, taking responsibility for one’s health and well-being, and the privileging of that which is considered “natural” over synthetic alternatives.

This is not to suggest that physical activity cannot be a helpful adjunctive treatment or an integral part of holistic wellness.¹ As I began to explore this topic, it was clear from the academic research, alongside personal accounts, that for many with various types of mental illness, physical activity was frequently cited as playing a transformative role in their lives. At the same time, however, for those with moderate to severe mental illness, there are often substantial barriers to being physically active (e.g., symptoms of the illness, stigma, lack of financial resources, transportation, etc.). What was missing from much of the discourse that strongly promoted physical activity for this population were practical, sustainable strategies for addressing these issues. As an example, the US’s Exercise is Medicine (EIM)

initiative, which encourages healthcare providers to prescribe exercise as they would a medication, does not even list people with mental illness as an underserved population in need of structural supports, even though depression is listed as one of the conditions that exercise can address.

Once I became aware of the promotion of physical activity as a way of treating mental illness, I began to see it everywhere: In the aforementioned news headlines and government documents, on social media, in casual conversations with peers. What I did not see a lot of at this time was extensive critique of this “exercise is medicine” phenomena, such as the way uncritically promoting physical activity as a treatment for mental illness—especially without proper social supports needed to make this accessible to the most marginalized of this population—can further perpetuate mental health disparities; how “exercise is medicine” can contribute to the “imperative of health” (Lupton, 1995), or the need for people with health issues to take it upon themselves to get well; or the shortcomings of physical activity to thoroughly address mental illness. This was surprising to me given the abundance of critical attention other mental health treatments receive (e.g., pharmaceuticals, talk therapy; Kitzinger, 1993), as well as physical cultural studies’ and sport sociologists’ longstanding critical analyses of physical activity as it relates to health, well-being, and social justice (e.g., Ingham, 1985; Markula, 1995, 1998; Vertinsky, 1990).

Given the gaps in the literature, I wanted to better understand why exercise is increasingly being promoted as a (mental) health treatment and, relatedly, why it seems to receive less critique compared to other mental health treatments. I also wanted to know what was being done by major public health organizations, such as

the Exercise is Medicine initiative.² Lastly, I believed it was important to hear from people with mental illness about their experience with physical activity. I was particularly interested in the exercise experiences of women with obsessive compulsive disorder as there has been little attention to both gender and obsessive-compulsive disorder (OCD) in the extant literature focused on mental illness and physical activity.

Research Aims and Significance

The overall purpose of this project is to advance knowledge related to mental health and physical activity in an effort to create conditions that can better serve people with mental illness. More specifically, based on the findings, I put forth recommendations as to how dominant narratives related to physical activity and mental illness can be improved, practical changes can be made to the Exercise is Medicine initiative and related programming, as well as future research needs. As individuals with mental illness face myriad disparities including, but not limited to, health outcomes (e.g., higher rates of obesity, ADD), quality of life, job opportunities and income, housing, leisure pursuits, social support, and feelings of self-worth or self-esteem (Perese, 2007; Robson & Gray, 2007; Safran et al., 2009), it is imperative that attention is given to understanding how to better serve this population. As will be discussed in the literature review in more detail, physical activity can be quite beneficial and health enhancing for people with mental health issues. However, these benefits are arguably only achieved if barriers to engagement in physical activity are mitigated, accurate messaging related to the mental health benefits of exercise is put

forth, and appropriate programming that makes physical activity more accessible to this population is readily available.

The aim to help people with mental illness is in line with the political imperatives of the physical cultural studies (PCS) project. As noted by PCS scholars (e.g., Andrews, 2008; Atkinson, 2011; Giardina & Newman, 2011; Silk & Andrews, 2011), PCS (research) projects are explicitly political. They aim to effect change, to contribute to a more equitable society, and to improve the lives of marginalized populations. In addition, PCS scholars have called for increased interdisciplinary projects—that is, those that go beyond the over-reliance on purely sociocultural accounts of a particular phenomena (Thorpe, 2014). As (women's) mental illness can be seen as the interconnection between biological, psychological, and sociocultural or environmental factors, it is important that research on this topic takes seriously the potential role of the biological and psychological, along with the social and cultural, in people's experiences coping with mental illness through exercise or other means. Too often women's mental health is reduced to sociocultural processes (e.g., inequality, patriarchal power relations), obscuring the psychic or physical pain associated with mental illness, and potentially creating a hierarchy of preferred treatment options (i.e., the denigration of biomedical approaches to care; (Blum & Stracuzzi, 2004; Dubriwny, 2013; Godderis, 2010; Fullagar, 2008a, 2009; Lafrance, 2012; O'Brien, 2012).

This research project also helps to fill an empirical gap in the physical cultural studies literature through its focus on mental illness. As argued by Fullagar (2017), mental health has largely been neglected in the field of sport sociology or physical

cultural studies. This neglect can reify a mind-body dualism as the physical body has been the privileged site of inquiry and, through the absence of attention to mental health, presumably disconnected from the mind and mental well-being.

Lastly, my proposed research contributes to the broader field of kinesiology and public health by providing a nuanced, contextualized account of the role that physical activity plays in the lives of women with OCD. The ways in which physical activity may act as an adjunctive treatment for people with OCD has been understudied. And, in addition, too often research focused on women's mental illness and physical activity does not pay adequate attention to the broader socio-political forces that may make access to physical activity difficult. As public health is committed to mitigating mental health disparities, such research is needed in order to ensure people with mental illness are provided with the necessary information and resources needed to enhance their well-being.

Research Questions

It is against this backdrop that I pose the following research questions to guide my analysis:

RQ1. What are the dominant narratives related to physical activity as a mental health treatment? What political, social, economic, technological, and cultural factors come together to create the context in which such narratives circulate and are rendered intelligible?

RQ2. How is mental illness addressed by the Exercise is Medicine initiative?

RQ3. What are the exercise experiences of women with OCD? To what extent do they find physical activity to contribute to their mental health? What are the

shortcomings of physical activity in reducing their symptoms, as well as the barriers to engagement in physical activity?

Overview of Dissertation

I begin by providing an explication of the theoretical underpinnings of this project, which brings together three different theoretical fields: feminist perspectives of women's health, critical public health (i.e., ecosocial model), and (physical) cultural studies' theory (and method) of articulation and radical contextualism (Andrews, 2002; Grossberg, 2010; Hall, 1986; Silk & Andrews, 2011; Slack, 1996). From there, I give an overview of the extant literature related to physical activity as a mental health treatment, focusing specific attention on women's mental health. Following the review of relevant theory and literature, I detail the methodology and methods that informed this project. Specifically, I discuss the method of thematic analysis, and provide a detailed overview of the steps I took to gather and analyze data.

Following the literature review and methods sections, I move on to my three empirical chapters. The aim of the first empirical chapter is to understand what narratives related to physical activity as a mental health treatment are perhaps most visible and accessible to the lay public (thus, potentially affecting their views on mental illness and physical activity). In order to answer this question, I conducted a systematic analysis of newspaper and magazine articles focused on mental health and physical activity. Also included in this analysis were government documents, materials posted on public health websites, and social media content. In addition to providing an overview of the dominant discourses, in other words, examining *what* is

being said about exercise and mental illness, I analyze *why* it is that these messages exist. I use the method/theory of radical contextualism to determine what factors (e.g., social, economic, technological, cultural) come together to form the current context in which such narratives related to mental illness and exercise circulate.

In addition to understanding what discourses pertaining to “exercise is medicine” for mental health are circulating (and why), it is also important to analyze what efforts are being taken to make physical activity more accessible to this population. With this in mind, I examined the Exercise is Medicine’s website in order to understand if, or how, mental illness is being addressed. Specifically, how is the relationship between mental illness and physical activity discussed in the organization’s materials? What resources are provided to healthcare practitioners, exercise specialists, or the lay public with regard to physical activity for mental health treatment? I chose to focus on the Exercise is Medicine initiative as it is at the forefront of efforts to promote the use of exercise prescriptions to help treat or prevent a range of chronic illnesses.

While the first two empirical studies focus on the macro and meso level, examining what is being said about exercise as a mental health treatment, why such messages are being promoted, and what efforts are being taken to make physical activity accessible to this population, in the third empirical chapter, I report on the lived experience of being physically active while coping with mental illness. Based on 26 interviews conducted with 14 participants, I focus specifically on the exercise experiences of women with OCD (an understudied population) in order to understand the extent to which participants view physical activity as a form of treatment,

including the benefits, shortcomings, barriers, and facilitators to engagement in exercise.

In the concluding chapter, I bring together the data from the three empirical chapters to put forth recommendations as to how messages, programming, and additional resources related to mental health and physical activity can be improved in order to make physical activity more meaningful, accessible, and health-enhancing for people with mental illness. I end this chapter with suggestions for future research.

Chapter 2: Review of Literature

Theoretical Framings of Women, (Mental) Health, and Physical Activity

The etiology of mental illness, as well as the potential benefits of physical activity as a holistic form of treatment, can be seen to be the result of the interaction between biological, psychological, sociocultural, and environmental factors. Many feminist scholars, however, have been reluctant to embrace biological or even psychological understandings of mental ill-health due to the historical (and continued) oppression of women at the hands of a medical system that reduced women to their (faulty) anatomy and physiology (Ehrenreich & English, 2011; Vertinsky, 1990). However, in recent decades, scholars in PCS (e.g., Thorpe, 2014, 2016) as well as other health disciplines (e.g., Ussher, 2010; Wilson, 2004, 2006) have been calling for interdisciplinary accounts of women's health and physical activity, making the argument that ignoring the materiality of the body can result in incomplete understandings of women's experiences with their bodies and well-being. In order to account for the complexity and nuance of the topic, I draw upon theoretical insights from three different areas: Feminist theory, critical public health, and physical cultural studies. I begin by expanding upon the aforementioned (feminist-informed) ideological and theoretical debates pertaining to women's mental health. From there, I provide an overview of the ecosocial model (Krieger, 1994, 2001, 2008), which can be seen to allow for a more comprehensive understanding of mental illness (and physical activity). I conclude by discussing how the (physical) cultural studies theory and method of articulation and radical contextualism can complement the ecosocial

model by providing a more thorough understanding of the cultural context in which the use of exercise as a therapeutic is situated.

Feminist theory. Historically, women have been treated by the medical establishment as being naturally prone to mental health issues (Smith-Rosenberg, 1985). Such assumptions were based on the idea that women had faulty biology (e.g., the uterus was thought to be the cause of mental illness for much of the 19th Century) or, in the case of Freud's work, were prone to psychological neuroses (Ehrenreich & English, 2011; Kukla, 2005). The idea that women are more susceptible to mental illness or other types of sickness due to supposed inherent qualities was used to justify keeping women out of education, various sports or physical activities, political positions, and other realms of society (Vertinsky, 1990). In addition, as women's mental health issues were thought to be caused by individual shortcomings, the treatments prescribed by healthcare providers, who were predominantly men until the second half of the 20th century, focused largely on changing women through medication or psychoanalysis.

In response, feminists critiqued the medical control of women's bodies, highlighting the ways in which social and cultural institutions, norms, and practices contributed greatly to women's development of mental health issues (Chesler, 1972; Ussher, 1991). As such, efforts that focused on changing the woman, as opposed to changing society, were met with vigorous critique (Kitzinger, 1993). Kitzinger (1993), for instance, took therapists to task for helping women to cope with a patriarchal society, as opposed to engaging in activist efforts to enact macro-level changes. Others have taken—and continue to take—issue with the diagnostic and

statistical manual (DSM) (Cermele, Daniels, & Anderson, 2001);³ the construction of particular mental health issues such as Pre-Menstrual Dysphoric Disorder (PMDD; Offman & Kleinplatz, 2004) or post-partum depression (Dubriwny, 2013; Godderis, 2010); the assumed over-prescription of psychotropic medications to women (Metzl & Angel, 2004); and biomedicalized accounts of women's mental health, more broadly (Fullagar & O'Brien, 2013; Lafrance, 2007).

While such critiques are important in highlighting the ways in which women's mental illness cannot be reduced to bio-psychology, and, further, questioning what we define as mental illness in the first place, a body of literature continues to focus solely on the sociocultural aspects of women's mental health, positioning diagnostic labels and individualized treatments—particularly antidepressants—as the result of powerful, monolithic, psychiatric and pharmaceutical industries (Pickersgill, 2012). Many of the researchers making such arguments contextualize both the diagnosis and treatment of women's mental illness as being the result of a neoliberal era in which values such as individual responsibility for one's health (e.g., seeking treatment and working towards recovery), and free markets (supposedly) dominate (Fullagar, 2009). Such accounts of women's psychiatric medication use inadvertently privileges treatments that are not tied to powerful corporations; leisure activities, for instance, are seen as more resistive, and potentially more effective, ways to cope with depression (Fullagar, 2008a, 2009). Following this logic, women who do take medication are constructed as being less empowered: their choice to take medication was not a choice at all, but the result of how they had been hailed by the medical industry to see themselves as “neurochemical subjects” in need of substances that

would change their neurochemistry—as opposed to changing society (Fullagar, 2009).

Such research merges with related—though less theoretical—critiques of pharmaceutical use, such as the cottage industry of pop-psychology texts (e.g., Kirsch, 2010) and messaging from lay people, such as celebrities (perhaps most infamously, Tom Cruise). Messages put forth in these texts and media not only lament the over-prescription of psychopharmaceuticals, but cast the medication as having socially undesirable qualities, such as numbing effects, or being a way for individuals to ‘take the easy way out’. For instance, in a 2012 video in which pop star, P!nk (Alecia Moore) described the impetus for her (then) new song, she explained that “For me, it’s about how I think the entire world is numbed down. Whether it’s antidepressants or anti-anxiety or—it just seems there’s a pill for everything now.” She went on to explain that “This song was written in response to my friends who have taken anti-depressants and became numb, disengaged robots” (Moore, 2012).

While purely sociocultural accounts of women’s mental illness continue to proliferate, there is a push to incorporate more interdisciplinary understandings of the body within a variety of disciplines, including, but certainly not limited to, physical cultural studies and sport sociology (Thorpe, 2014, 2016). Recently, for example, sport sociologist Jane Caudwell (2015) wrote an auto-ethnographic account her experiences with indoor rowing as a way to improve her depression. In addition, van Ingen (2011) reported on the mental health benefits accrued by women survivors of trauma who took part in a program that combined boxing and more traditional

counseling. Other scholars, such as Esmonde and Jette (2017), and Millington and Wilson (2017) have called for physical cultural studies work to move beyond purely anthropometric analyses, and account for the agency of non-human matter.

For many of these physical cultural studies scholars, the shift to move beyond the discursive is motivated, in part, by theoretical developments, such as new materialism, or feminist materialism (Alaimo & Hekman, 2008; Coole & Frost, 2010). The basic premise of such theories is that excessive—or exclusive—attention to the discursive, or role that language, culture, and politics plays in shaping phenomena, preclude more nuanced understandings of the relationships between biology and culture (Alaimo, 2010; Alaimo & Hekman, 2008; Coole & Frost, 2010). In fact, theorists argue that nature-culture dualisms, which are perpetuated through purely discursive analyses, are inaccurate as ‘nature’ and ‘culture’ are not neat, discrete categories, but can better be seen as intertwined and co-constructing one another (more on this below; Alaimo, 2010).

In the next section, I expand on such theoretical insights, with particular attention to women’s mental health. While I draw on theorists who may be considered to be new materialists (e.g., Elizabeth Wilson, Ann Fausto Sterling), I focus more specifically on the ecosocial model as a theoretical framework (e.g., Krieger, 1994, 2001, 2008). As will be explained in more detail, the ecosocial model similarly accounts for the intersection of the biological, psychological, social, cultural, and environmental, yet it lends itself to a more practical application, while new materialist theorizing is, at times, very abstract. As I wish for my work to be applied to the

advancement of better mental health programming or messaging, I find the ecosocial model to be a better theoretical fit with my project.

Overview of ecosocial models of health. Ecological approaches to understanding particular health or social issues were developed in the 1960s (e.g., Bronfenbrenner, 1977). The general idea was that a particular health or social issue could not be wholly understood by studying one particular facet of it, such as physiological processes, or family dynamics. Instead, all phenomenon were thought to be comprised of factors existing at various levels such as the intrapersonal (biology, behavior, psychology, education, resources), interpersonal (social support, family, peers), organizational (organizational rules, regulations, physical structure), environmental (built environment, community resources, climate), and policy/structural (economic systems, federal and state laws, institutional policies or norms (Richard, Gauvin, & Raine, 2011). As such, when examining a person's experience coping with mental illness, for instance, one would have to map out the factors at each level that may shape that individual's unique experience.

Ecological models have evolved since the 1960s, and scholars continue to fine-tune them to help create more robust tools and frameworks with which to better understand complex health issues. Krieger (1994, 2001, 2008) has been particularly influential in advancing an ecological approach to studying population health, in particular, her development of the ecosocial model. She viewed existing models as failing to account for the ways in which health-related phenomena are produced by the inter-connection between the various aforementioned levels. In other words, if one is to understand a particular (health) phenomena, s/he has to look at how

influences from various levels intersect; the individual level factors often cannot be neatly separated from the macro factors or political structures.

Krieger and Smith (2004), for instance, give an example of how the increasingly early onset of menstruation in girls in Western nations can be seen as the interplay between biological bodies, as well as sociocultural factors such as access to healthy foods as there is thought to be a link between obesity and earlier onset of menstruation. Access to nutritious food relates to socioeconomic status and the unequal opportunities people of marginalized groups have to obtain a living wage. In addition, it is thought that hormones added to dairy products may be responsible for altering girls' physiology, resulting in health issues such as earlier onset of menstruation. Not only is there the biological "event" of a girl menstruating at a certain age, but the social meaning that this has in a given society (e.g., reproductive readiness; sexualization and "slut shaming" by peers; sexual violence). In that way, the biological and social processes that lead to a girl's first menstrual period, and the ways it is understood in a given context, are the result of the intertwining of the aforementioned variables (Krieger & Smith, 2004).

Additionally, Krieger (2008) emphasized the necessity of accounting for temporal aspects of health, which was left out of previous ecological models. Temporal aspects include life course development, as well as the simultaneity with which interactions between different entities take place, rendering previous notions of upstream/downstream, or distal/proximal health determinants inaccurate. To elaborate, some previous ecological models, or similar frameworks in public health, have used the terms upstream and downstream, or distal or proximal as ways to

figuratively describe the immediacy with which a particular risk factor can contribute to a health outcome. Expanding on the menstruation example, the consumption of a high fat, high dairy diet, and maintaining a high BMI would be considered a proximal, or downstream determinant of health, while the dairy industry's production of milk and other products infused with hormones would be considered an upstream, or distal factor. However, according to Krieger, such separation of corporate actions—as well as the larger socio-political context in which corporations are (or are not) regulated—and individual behavior, is a false dichotomy: the health outcomes associated with dairy consumption or high fat diets exist only as a result of multiple, simultaneously occurring events ranging from physiological processes to capitalist economic systems and historical and current institutionalized injustices. To represent, visually, or through epidemiological studies, consuming particular foods as having a more immediate, or larger (causal) impact than the socio-political systems that contributed to it, is placing more emphasis on the individual level, versus the social, historical, and economic levels from which it cannot be separated (Krieger, 2008).

A second aspect of temporality concerns the development of a particular health issue, taking into account historical processes that are inextricably linked to a particular health outcome (Krieger, 2008). At the macro level, and keeping with the menstruation example, girls who are considered to be overweight are disproportionately girls of color residing in lower income areas where the presence of food deserts, among other factors, makes it difficult to obtain nutritious foods. Further, such areas often have high levels of toxins in the air and water supply as they are more likely to be located near toxic waste sites (Bullard, 2000). It is not a

coincidence that people of color are more prone to living in these areas: historical injustices such as discriminatory housing and employment practices in the 1950s onward have segregated a large percentage of Black individuals and families into poorer resourced communities, literally marginalizing them (Hirsch, 2000). Such institutionalized racism (and classism) continues, and can be seen to be a major reason why government actions have not been taken to eliminate environmental injustices (see, for instance, Tuana, 2008).

A related aspect of temporality also includes the ways in which historical and present day injustices become embodied (Krieger, 2005; Krieger & Smith, 2004), affecting individuals' health—and that of future generations—long past the initial event. This occurs not only in overt ways such as the form of particular illnesses or disorders, but in less immediately visible ways such as by increasing one's cortisol levels (due to increased stress) or blood pressure, altering telomere length, or through epigenetic changes (Geronimus, 2013). Researchers are finding that changes at the epigenetic level can be caused by environmental factors, such as the previously described events, and can be passed on to future generations. In this way, trauma and injustices get “under the skin” and may leave a lasting (intergenerational) impact (Bowleg, et al., 2003; Meyer & Frost, 2013).

Expanding on the concept of embodiment, researchers are finding that it is not only major traumas or repetitive, everyday (minority) stress that “get under the skin”, but that lifestyle and cultural practices can become embodied as well (Bourdieu, 1984; Freund, 2011; Williams, 1995). As theorized by Bourdieu (1984), an individual's daily habits and routine—including food consumption, leisure pursuits,

physical activity or sporting practices, labor, coping mechanisms, speech patterns—are not random or necessarily freely chosen, but the product of one’s environment or habitus. Different classes of people may adopt particular practices as a result of necessity (i.e., having a dearth of alternative choices), or a way to distinguish themselves from others in different classed positions (e.g., Williams, 1995).

Women’s mental health and physical activity from an ecosocial perspective. Many feminist scholars have argued for, or utilized, an ecosocial approach when examining women’s mental illness. Other names given to these frameworks include the bio-psycho-social, or material-discursive (Stoppard, 1998), material-intrapsychic-discursive (Ussher, 2004; 2010), or, as previously mentioned, new materialist (Wilson, 2006). What the different theories and frameworks have in common is an attention to the multifaceted nature of mental illness, with the goal of understanding the intersections or entanglements among its various elements, with one realm (e.g., the social), not being privileged over another (e.g., the biological).

Wilson (2006), for instance, elucidated the interconnection between the brain, body, and culture with regard to psychopharmaceuticals, such as selective serotonin reuptake inhibitors (SSRIs), used to treat depression. She noted that too often, psychopharmaceuticals are thought of as directly—and solely—affecting the brain. However, more accurately, such pharmaceuticals are administered orally, and digested in the gut, or in some cases, small intestines. From there, the molecules are transferred throughout the body, with the brain being but one location. In other words, the effects of the pharmaceuticals are far-reaching, acting not only on the brain, but the gut, central nervous system, and other areas (as evidenced, for example, by the

way in which some people experience nausea or indigestion by taking the medication). Wilson further supported her case regarding the interconnectedness of the brain, body, and culture by showing how serotonin is not produced in the brain, but different parts of the body, and only with the presence of other molecules; for instance, the amino acid, tryptophan, which can only be obtained through foods. In this way, the body's capacity to produce serotonin, which ends up gathering in the brain, and is the prime neurotransmitter that SSRIs act on (suppressing the reuptake of it in the synapses), is directly affected by culture, or the types of food that are ingested.

Similarly, Ussher (2010), in her analysis of PMS/PMDD, works through the connections between the sociocultural, psychological, and biological. While arguing that this form of distress can be seen to be socially constructed, and often used to justify keeping women out of positions of power, she did not reduce the conditions to purely the realm of the social. She explained that for some women, the suffering they experience before their periods is embodied and real. To render it solely the product of power relations is to dismiss the suffering these women may experience. It can also be argued that different discourses surrounding women's menstruation may change the way women think about and process their embodied sensations; however, the physiological experience of pain would still be present (Stoppard, 2010).

This is not to say that biology is fixed. As explicated by Fausto-Sterling (2005), biology and sociocultural factors co-constitute one another in inextricable ways. It is not simply that culture maps onto a predetermined and fixed biological body, but that 'biological body' is continually being changed by culture, while culture

is, in turn, changing in response. The recent (renewed) attention to epigenetics (e.g., Guthman & Mansfield, 2013) is another prime example of the way biology is changed by the environment.⁴

Scholars studying women's embodiment and mental health (broadly defined), spanning fields of physical cultural studies/sport sociology, therapeutic recreation, social work, and physical therapy, among others, have also provided theoretical accounts of the complex ways in which women's mental (ill) health is embodied, or manifested in and through bodily movement and posturing, or in ways that are not perceivable. As cogently noted by Kolnes (2017), "[t]he basic idea is that the body and psyche are indivisible, and the unresolved and problematic feelings are contained in, and expressed through, the body" (p. 486).⁵ Two illustrative examples of this interconnection between biological, psychological, and sociocultural factors comes from Heywood (2011) and Kolnes (2016).

Heywood (2011) discussed the concept of anorexia athletica. Anorexia athletica is described as a subclinical form of anorexia in which individuals may restrict calories, binge, purge, and engage in excessive exercise. For high performing athletes, this is often disguised as a pursuit of athletic excellence as opposed to an eating (or exercise) disorder (Heywood, 2011). People with anorexia athletica go to great lengths to seek mastery over the body with regard to their restrictive calorie intake, as well as their high levels of physical activity. In this way, they are overriding the body's innate systems, including the seeking system, which is responsible for directing an animal to food when hunger cues are present (see also, Panksepp, 1998). Heywood argues that the ability to override such biological programming is due to

the power of a society's standards, rules, or goals (SRGs), which are taught to children at young ages and become internalized. Failure to live up to a culture's particular SRG's results in "self-conscious" emotions such as embarrassment, guilt, or shame, where an ability to meet or exceed such norms may result in pride. In Western society, a thin, toned body-type is viewed as the desirable norm. The ability to meet this, through carefully regulated dieting and high levels of exercise, are valued, while a failure to embody this ideal may lead to shame in particular people. In this way, people with anorexia athletica can be seen as internalizing the SRGs related to body image perhaps more than the average person (and arguably there are other biological and psychological mechanisms at play that Heywood does not explore), thus allowing them to override the biological seeking drive.

Kolnes (2017) also provided a bio-psycho-social account of how eating disorders can become embodied, and how physically manipulating such individuals' bodies can be part of a holistic treatment program. According to Kolnes, the physical effects of eating disorders such as anorexia go beyond emaciation. Women with anorexia have been found to have low muscle mass and bone density, cardiac and respiratory problems (as the heart and respiratory muscles atrophy), and neurological issues. Individuals may also present with poor posture, such as stooped shoulders. However, the physical manifestation of anorexia is not due solely to biology (i.e., atrophied muscles); instead, something like poor posture can better be seen as the result of both muscular instability as well as psychological factors such as low self-esteem or depression, which can be seen as precursors to, or symptoms of, anorexia. Unresolved emotional trauma may be stored in the body of people with anorexia, in

part, accounting for one's physicality. Kolnes argued that helping women with anorexia to engage in particular physical movements, or regain control over their bodies, may help them to get in touch with (unconscious) emotions that may be impeding their recovery (Kolnes, 2017).

As evidenced by the aforementioned examples in this chapter, when recognizing the multifaceted nature of women's mental illness, different approaches to mental health treatment can be seen to complement one another (though of course, not without tension), as opposed to being seen as mutually exclusive. Martin (2001), for example, in placing individual suffering in conversation with larger sociocultural issues, argued that medicine can be seen as a way to help women with mental illness regain the energy, motivation, or overall ability to fight for macro-level changes that affect their—and others'—lives. Reiheld (2010) built on Martin's work by drawing attention to the positive aspects of medicalization and pharmaceuticalization (while also acknowledging the negative side to such processes). She argued that the medical field as a privileged institution has the ability to 'legitimate' women's suffering via diagnoses. For example, before Chronic Fatigue Syndrome (CFS) was acknowledged by the medical community as an actual syndrome that, while still not well understood, had a biological basis, women suffering from such an illness were dismissed as malingering, or suffering from the "yuppie flu". Such descriptions are in line with traditional ways in which women's ailments were dismissed as nothing more than an inability to cope with the world. When CFS was medicalized, such women's suffering was taken more seriously, potentially reducing some of the shame and marginalization these women experienced (Reiheld, 2010). In this way, ecosocial

understandings of women's bodies and health can provide for better treatment and prevention by engaging with the complex interactions between the biological, psychological, and sociocultural processes and institutions.

Radical contextualism and articulation. The ecosocial model provides an important framework for helping to think through how and why mental health disparities manifest, as well as how people with mental illness may experience treatments such as physical activity. What it falls short of, however, is explaining why it is that exercise is positioned as a form of medicine in the first place. The theory of articulation, or radical contextualism, can be seen as a useful lens through which to examine the ontology of “exercise is medicine”.

The ecosocial framework's attention to the contextual factors that affect one's health—and lead to health inequities—is essential in moving beyond a reductionist approach that blames individuals for ill-health (Krieger, 1994, 2008). However, as Slack (1996) noted, context is not something “out there” within which social processes and structures exert their influence. Instead, the context itself is constituted through the coming together, or articulation, of a variety of social, economic, political, cultural, and technological factors within a given historical moment (Andrews, 2002; Grossberg, 2010; Hall, 1986; Slack, 1996). Such linkages produce or give meaning to a particular phenomena; however, the connections—and thus, meanings they produce—are not inevitable or fixed, but historically-specific. To illustrate this, Hall (1986) gave the example of a lorry (truck). It is made up of the cab and the trailer, which are connected by a chain. The chain links two pieces of equipment that would otherwise have no pre-existing relationship. Through this

linkage, the entity that came to be known as the lorry is produced. Just as there is no lorry without the chain that connects the cab and trailer, it can be said that any phenomena is non-existent without the discursive linkages between various social forces (e.g., economic, social, cultural, etc.). In other words, an entirely new entity or phenomena is created—however fleeting—through the articulation of social forces that have no pre-existing or necessary connection (Slack, 1996).

To use “exercise is medicine” as an example, there is no innate or natural reason why exercise is considered a type of medicine in 21st century America. What makes exercise as a form of medicine meaningful is, instead, the result of a variety of social, political, economic, cultural, technological—and I would add, biological and psychological—forces that come together to produce the “exercise is medicine” movement.⁷ This position, however, does not deny the material consequences of such articulations. While there is “no necessary correspondence” (Hall, 1985, p. 94, as cited in Andrews, 2002) between the different social forces, there are structures and processes in place (e.g., economic systems, discrimination based on race, sex, etc.) that can have very real effects on individuals’ lives. Thus, while the specific meaning, interpretation, or effects of a given phenomena will be based on one’s social position, the material reality or outcomes cannot be reduced to a relativist ontological position (Hall, 1986).

Further, and in line with Marx’s dialectic materialist analysis, while social structures shape people’s lives, they are not determinant (Andrews, 2002). In other words, the economic system—or any other structure— does not have a causal effect on an individual’s ability to meet their various needs; instead, it can be seen to enable

or constrain one's opportunities or subjectivity (Andrews, 2002). At the same time, individuals have the ability to exercise their own agency and, in turn, change their environments.

The goal of a radically contextual project is to map out the connections, or articulations, that produce a particular context or phenomena (Grossberg, 2010) such as the current push towards promoting exercise as medicine, especially as it relates to mental health. Through this mapping, things that were once taken for granted or invisible to some are made clear. This allows for a re-articulation, or intervention, to take place.

Such attention to intervention, change, and the overall goal of creating a more equitable society is at the core of a PCS project (Andrews, 2008; Atkinson, 2011; Silk & Andrews, 2011). PCS scholars are encouraged to be explicit in their politics, as opposed to adhering to the false belief that science can ever be truly objective and free from political agendas (Lather, 2004; Silk, Bush, & Andrews, 2010). Research, in this way, is to be conducted with the explicit aim of advancing knowledge that “*impacts* and is *meaningful* to the range of communities who we have the potential to touch” (Silk & Andrews, 2011, p.5, emphasis in original). The goal, therefore, is not neutrality, but politically informed praxis. Importantly, as part of this praxis, scholars are implored to take their work outside the walls of academic institutions, and make such knowledge accessible and useful to the people or institutions with whom they are working or trying to influence (Silk & Andrews, 2011). This may take the form of attending community meetings, writing blog posts, op-eds, or other media content, developing zines, and so on (Atkinson, 2011; Silk & Andrews, 2011.) To what

extent such ambitious goals are actually achieved—in this project, as well as others—however, is questionable (Atkinson, 2011). This is a point to which I return in subsequent chapters.

Substantive Literature Review: Situating Exercise in the Treatment of Mental Illness

Since the 1970s, there has been a growing body of literature dedicated to understanding the role that physical activity may play in improving the lives of people with a range of chronic illnesses, including, but not limited to, mental illness. Early research on the topic of mental illness and exercise was largely lab-based, focused on the bio-physiological benefits of physical activity on this population's health (e.g., cardiovascular function, blood pressure, CO₂ max; Crone, Smith, & Gough, 2005). However, there has been increased attention—spanning the fields of public health, kinesiology, nursing, social work, psychology, medicine, and sport sociology, to name a few—towards better understanding not only the biological, but the psychological and social benefits of physical activity, as well as developing community-based interventions designed to help people with mental illness engage in meaningful, safe, and accessible physical activities. This is particularly important as people with mental illness have been found to engage in lower levels of physical activity than their peers; this is especially true for women and older adults, as well as people with less social support and education (Daumit et al., 2005; Janney et al., 2008). However, as will be discussed below, there remains a dearth of literature on particular mental health issues—including OCD—as they relate to physical activity. In addition, there has not been extensive attention to the intersection of gender,

mental illness, and physical activity. In what follows, I provide an overview of the literature related to mental illness and physical activity, with specific regard to gender and OCD. I begin with a discussion of the use of physical activity to treat mental health issues, in general, before focusing more specifically on OCD. From there, I provide an overview of research that has focused on the intersections of women's mental health and physical activity, and then outline existing critiques of the promotion of exercise as a medicine. I then explain how my project builds upon this existing body of substantive literature and conclude with a reminder of my research questions.

Physical activity as an adjunct treatment for mental illness. There is an abundance of literature focused on the use of physical activity as an adjunctive treatment for a variety of mental illnesses. This research continues to expand, spanning fields such as public health, medicine, kinesiology, nursing, social work, sociology, leisure studies, and other related fields. The majority of the research on exercise and mental illness has focused on depression; however, there is a growing body of work looking at its effectiveness in helping people with other mental illnesses such as schizophrenia, bipolar disorder, anxiety disorders (e.g., post-traumatic stress disorder), and eating disorders. Researchers have found that, in general, people with mental illness report improvements in energy levels, mood, sleep, stress levels, self-esteem, a sense of control and structure to their day, and weight management (Lassenius et al., 2013; McDevitt et al., 2006; Ussher, Stanbury, Cheeseman, & Faulkner, 2007). However, individuals also report barriers to physical activity including symptoms of mental illness (e.g., weight gain, ruminations, hallucinations),

the structured schedule of one's group home or psychiatric facility, low self-efficacy or self-esteem, a lack of social support, and fear of being in public due to stigma related to mental illness (Lassenius et al., 2013; McDevitt, Snyder, Miller, & Wilbur, 2006; Ussher, 2008). For women in particular, additional benefits to exercise include an increased sense of control and safety, appreciation of their body's capabilities as opposed to appearance, and mind-body integration (Chrisler & Lamont, 2012; Hefferon, Mallery, Gay, & Elliott, 2013). Gender-specific barriers to physical activity among women with mental illness consist of body image concerns, and a lack of women-only physical activity spaces (e.g., McDevitt et al., 2006). I return to this discussion of gender, mental health, and physical activity below.

Researchers have increasingly focused attention on the development of exercise, or lifestyle interventions and programming aimed at helping this population become more physically active by addressing some common barriers. In the Australian and UK context, many—though not all—such programs are part of national exercise referral schemes, and are subsidized by the government. They range from group countryside walking, to sport and fitness center-based programs, and aim to reduce barriers to participation through referrals (i.e., encouragement) from doctors, reduced costs, the presence of fitness specialists and tailored exercise plans, and transportation assistance (Crone, 2007; Crone et al., 2005; Crone & Guy, 2008; Hodgson, McCulloch, & Fox, 2011).

In the US context, although government funding is not as readily available, there has also been increased physical activity and lifestyle interventions and programs designed for people with mental illness. Specifically, there is increased

emphasis on creating community-based programming. As individuals with mental illness often feel stigmatized and disconnected from their communities—especially those who reside in psychiatric facilities, nursing facilities, or prison—successful programs are those that help to integrate this population. Integration is fostered through the use of community recreation or fitness services, and opportunities to recreate outside of the confines of a clinic (Bizub, Joy, & Davidson, 2003). In addition, unlike interventions implemented in academic settings, community-based interventions are more likely to take into account participants' everyday lives, and give them control over the program's design and implementation (Cabassa, Ezell, & Lewis-Fernández, 2010).

A particular type of community-based physical activity that has been found to be especially well-received by this population is nature-based programs, with 'nature' conceptualized as areas that are less developed by humans, and include a variety of flora, fauna, animals, and bodies of water (also referred to as 'green' or 'blue' spaces). Scholars and policy makers, among others, have highlighted the salutogenic benefits of being in—or even viewing—nature, including sensory pleasures, mood enhancement, stress reduction, and increased recovery time (Maller et al., 2006). Adventure therapy programs, in particular, have received scholarly attention as they have been found to help women and girls with a variety of mental health issues (e.g., eating disorders, trauma disorders, depression; Maguire & Priest, 1994; Powch, 1994). Through activities developed by the instructors (e.g., rock climbing, trust building activities, portaging) as well as unanticipated challenges (e.g., rugged terrain, adverse weather, equipment malfunction), participants may develop physical

and psychological skills and foster relationships. Such relationship and skill building is essential as women who have experienced sexual or relationship-based violence often have difficulties learning to trust others, as well as oneself. In addition, unlike gym-based settings, there is less attention to athletic performance and appearance, which allows participants to reconnect to their bodies, appreciating its capacity for experiencing pleasure and overcoming obstacles, and its inter-relationship with other living and non-living entities (Allen-Collinson & Leledaki, 2014).

Sport-focused community programs have also been found to improve the mental health of participants, and mitigate barriers to treatment. For men, in particular, sport can act as a “hook” that can reduce the stigma associated with mental health treatment (Magee, Spaaij, & Jeanes, 2015). Magee and colleagues (2015), for instance, assessed UK-based soccer programs focused on improving the symptoms of mental illness by combining soccer with clinical services, education, vocational programming, and general health and wellness instruction. They found that participants reported benefiting from the social support of their peers, the reduced stigma related to mental health treatment (i.e., “normalizing” experience), a closer relationship with their clinicians, and fun and enjoyment associated with the sport. Similarly, Carless and Douglas (2004) found that men with mental health issues who took part in a free nine-week golf program (which included transportation and follow-up phone reminders) also reported enjoying participating in something “normal”, such as sport, which provided a relaxing, fun experience and way a way to gain social support (see also, Carless & Douglas, 2008a, 2008b).

In addition to community-based programming, inpatient physical activity programs, or those that take place in psychiatric or hospital-based settings, have been found to be especially effective. In a review of the literature on exercise interventions for people with psychosis, Ellis and colleagues (2007) found that the interventions that were most successful were those that took place on inpatient units. This may be due to the increased social support in the form of healthcare providers as well as other residents. In addition, inpatient populations arguably face the most severe and debilitating symptoms, and, therefore, are in need of the most support (see also: Fogarty & Happell, 2005). Nursing scholars, in particular, have been influential in calling for increased attention by nurses and other healthcare providers in developing such programming (e.g., Happell, Davies, & Scott, 2012).

Physical activity as an adjunct treatment for OCD. While there is a robust amount of research focused on physical activity and mental illness, there remains a dearth of attention to physical activity as it relates to OCD. To date, I have been able to identify only four studies that focus specifically on OCD (Abrantes et al., 2009; Brown et al., 2007; Lancer, Motta, & Lancer, 2007; Rector et al., 2015; see also, Abrantes et al., 2012). Lancer et al. (2007) conducted an exercise intervention with eleven individuals with OCD consisting of 30-minute sessions of aerobic walking, three times a week for six weeks. They found that participants had significant reductions in general anxiety measures, OCD symptoms, and depression from the baseline data collection to the one month post-intervention follow up. Similarly, Brown and colleagues (2007) conducted a pilot intervention with 15 individuals with OCD consisting of 20-40 minutes of aerobic exercise (cycling, walking/jogging on

treadmills, cycling) 3-4 times per week. Compared to baseline scores, participants reported lower levels of obsessions and compulsions at 3, 6, and 12 weeks post-intervention. In what appears to be an analysis from the same intervention, Abrantes et al., (2009) noted that improvements in obsessions and compulsions, general anxiety, and negative mood could be seen after as little as one session of exercise. Lastly, Rector, Richter, Lerman, and Regev (2015) conducted a study to see if exercise combined with cognitive behavioral therapy (CBT) would result in improvements in OCD symptoms beyond a control (CBT-only) group. The exercise portion of the intervention consisted of 15-45 minutes aerobic sessions completed 3 times per week. Compared to the control group, the participants that received CBT as well as exercise reported a greater reduction in OCD symptoms, as well as enjoyment of physical activity. Some participants even noted that engaging in physical activity was a way to expose themselves to upsetting stimuli, thus proving to be particularly therapeutic.

Taken together, the research on exercise as an adjunct treatment for OCD is promising in that it appears to help reduce symptoms of OCD, as well as lower anxiety levels and improve mood. Abrantes et al. (2013), however, noted that not only is there a lack of research on OCD in general, but there is a need for randomized controlled trials (RCTs) in order to see if the benefits of physical activity on obsessive compulsive and related symptoms hold in larger samples, and when compared to a control group. In addition to RCTs that seek to determine the efficacy or effectiveness of physical activity as a therapy, it is important to understand the ways in which people with OCD experience physical activity—in general, and specifically as a type

of therapy. While intervention studies can provide important data, what is often missing from such research is the role of physical activity within participants' lives as a whole, including barriers and facilitators to engagement in physical activity, things they like or dislike about particular forms of exercise, and the reasons they believe they may or may not benefit from being physically active. Having such in-depth understandings of the relationship between physical activity and OCD can aid in the development of more applicable interventions, programming, and general understanding of OCD as it relates to exercise.

It is particularly important to better understand the exercise experiences of people with OCD as OCD has been shown to be related to eating disorders and exercise addiction or compulsion, which can result in a variety of negative health outcomes. In a review of the literature examining the association between OCD and eating disorders such as anorexia nervosa and bulimia nervosa, Altman and Shankman (2009) found that the lifetime prevalence of OCD in people with anorexia is between 0-69%; for people with bulimia, 0-43%. In populations of people with OCD, on the other hand, the prevalence of comorbid eating disorders is 3-17% for anorexia, and 3.1-10% for bulimia. Individuals with both eating disorders and OCD display symptoms of both diseases (e.g., disordered eating, obsessive or compulsive behavior), as well as shared personality traits such as perfectionism and impulsivity (Altman & Shankman, 2009). There is thought to be shared etiology between eating disorders and OCD (e.g., serotonin dysregulation) as well as potential genetic influences (Altman & Shankman, 2009; Serpell, Livingstone, Neiderman, & Lask, 2002; Swinbourne & Touyz, 2007).

While there is overlap between OCD and eating disorders, with some suggesting that they exist along an obsession-compulsive spectrum, they are not the same disorder. In other words, eating disorders, while similar to OCD, are not simply a specific manifestation of OCD. One distinction between eating disorders and OCD is the nature of the obsessions and compulsions. For people with eating disorders, the obsessions related to food and body weight are considered egosyntonic, or rational and somewhat pleasurable. Conversely, the content of obsessions for people with OCD is egodystonic as they are intrusive, unwanted, and irrational in nature (Swinbourne & Touyz, 2007). For example, one may fear that they will snap and murder somebody. In addition, while obsessions are a shared trait in individuals who appear to have both OCD and anorexia, it remains unknown to what extent malnourishment—as is present in eating disorders such as anorexia—may contribute to the manifestation of the obsessions (Serpell et al., 2002; Swinbourne & Touyz, 2007).

A high percentage of people with eating disorders also engage in excessive exercise as a way of managing their weight. When exercise addiction and eating disorders co-occur, it is considered to be a secondary form of exercise addiction (Berczik et al., 2012). Davis and colleagues (1997) found that roughly 81% of patients with anorexia in an eating disorder clinic engaged in excessive exercise. In the case of secondary exercise addiction, weight loss or maintenance is the primary goal, and exercise is one of the means by which that is achieved. Primary exercise addiction, on the other hand, is when exercise in and of itself is the compulsion. Some scholars have suggested that elite athletes, such as triathletes or distance runners, may

be more prone to this form of exercise dependence (e.g., Blaydon, Lindner, & Kerr, 2002; Slay, Hayaki, Napolitano, & Brownell, 1998), though, overall, the evidence is largely inconclusive (Berczik et al., 2012).

Exercise addiction or compulsive exercise is not merely engaging in high quantities of physical activity. Somebody considered to have an addiction to exercise maintains a rigid exercise routine that is one of the main—if not *the* main—priority in their lives. If unable to uphold such a routine, the individual experiences significant psychological distress (e.g., guilt, anxiety, depression) as well as symptoms of withdrawal, such as insomnia, blurred vision, or headaches (Bamber, Cockerill, Rodgers, & Carroll, 2000). Similar to other addictions, one develops a tolerance and must increase the amount of exercise one engages in (Berczik et al., 2012).

Maintaining such rigid routines—regardless of injury or other responsibilities— can compromise one’s ability to maintain relationships, carry out work duties, and engage in meaningful leisure pursuits. In addition to the psychological consequences, those with exercise addictions often experience physical injuries as a result of over-exertion (Berczik et al., 2012). For those with secondary exercise addictions (i.e., coupled with an eating disorder), the negative health consequences may be particularly significant due to combined effects of calorie restriction and over-exercising.

Due to physical activity’s association with health and morality, excessive exercise or exercise addiction is not considered by many to be a cause of concern. As an example, in a commentary promoting the use of physical activity in helping to improve mental health, Fox (2000) argued that the percentage of people who may misuse physical activity is negligible compared to those who are inactive. Other

scholars have suggested that exercise addiction can be viewed as a positive addiction compared to seemingly more destructive ones such as substance abuse (Glasser, 1976). Cox and Orford (2004) found that their participants who could be classified as having an exercise addiction echoed similar beliefs. While some did not believe they had a problem with exercise, others conceded that they may have an “addiction”, but did not see it as a bad thing.

Fortunately, more critical attention is being given to this issue, with scholars such as Schreiber and Hausenblas (2015) passionately arguing that excessive exercise can indeed be classified as an addiction and lead to destructive consequences similar to other forms of addiction. They point to the rise in “fitspiration” as contributing to the normalization of exercise addiction. Fitspiration is the promotion of a strict adherence to exercise through “no excuses” type of messaging that is often accompanied by images of (predominantly female) thin, yet athletic, and conventionally attractive individuals.⁸ In a culture in which excessive exercise is met with praise, and seen as a feat of great mental and physical fortitude—as opposed to on a continuum with addictions and eating disorders—it is not surprising that people develop disordered relationships with food, physical activity and their bodies (see, for example, Heywood, 2011, Thorpe, 2016).

Physical activity, mental illness, and gender. While the majority of research focused on physical activity’s (potential) use as a therapeutic has not focused solely on women or gender dynamics, there is a smaller body of research focused on this topic that is women-specific, or informed by a feminist or critical perspective that recognizes the influence of patriarchal society and culture in the formation of

particular mental illnesses. For instance, in Western nations, women and girls are socialized to view themselves as objects of the male gaze, with their self-worth derived from how their bodies fit norms of (hetero)femininity (Fredrickson & Roberts, 1997). This objectification of women has been linked to the development of depression, disordered eating or eating disorders, and other mental health issues. The objectification of women as a whole also perpetuates a culture that treats women as 'less-than', or things that can be mistreated, abused, or denied agency and rights, as exemplified by the high rates of violence against women and girls. Such trauma becomes embodied (Hurd Clarke & Griffin, 2008; Thompson, 1994), resulting in a variety of mental health problems. This is not to suggest that all survivors of trauma have a mental illness, but that rates of mental health issues in trauma survivors is higher compared to the general population (Thompson, 1994).

Participation in certain physical activities can be seen as a way to help women self-objectify less by taking the focus off of what their bodies look like, and, instead, focusing on their functionality (e.g., Duesund & Skårderud, 2003; Liimakka, 2011). It can also teach them to break gender norms by taking up space, and being unapologetically assertive and aggressive (in the appropriate physical activity spaces). Experiential education programs that involve spending extended periods of time in the outdoors—particularly in all-women spaces—engaged in activities such as rock climbing, camping, canoe/portaging, or hiking have been found to be particularly effective in helping women challenge gender norms (Holloway, Murray, Okada, & Emmons, 2014; McDermott, 2000, Powch, 1994; Whittington, 2006). As one example, women and girls who participate in such outdoor programming have

reported feeling a sense of accomplishment when able to carry out physically and mentally demanding tasks such as portaging. The participants in McDermott's (2000) study reported viewing their bodies in different ways after embarking on an all-women canoe trip. Similarly, girls in Whittington's research noted that they felt a sense of pride when able to complete a 23-day canoe trip without relying on the help of boys to complete some of the more physically demanding tasks (see also, Holloway et al., 2014). In addition, when participating in outdoor pursuits, one is less able to engage in beauty or appearance work such as shaving, applying makeup, washing regularly, using a mirror, or eating low calorie/low fat foods. This can help to take the emphasis off of one's appearance and allow women to reflect on the (gendered) meanings of such practices (Holloway et al., 2014; Whittington, 2006). The girls in Whittington's (2006) study found that they were able to reconsider their beauty and food rituals, which resulted in changes not only during the trip, but in the months that followed. Similarly, Kaptian (2003) researched an outdoor adventure therapy program for girls with eating disorders, noting that the participants were willing and able to eat heartily and try new foods such as hot dogs, s'mores, and grilled cheese.

In addition to nature-based activities, particular types of aggressive physical activity, such as martial arts, can help women coping with trauma, or other mental illnesses, regain a sense of control, confidence, or safety. In analyzing a 'boxercise' intervention for people with mental illness, Hefferon and colleagues (2013) found that some of the women participants gained an increased sense of safety and confidence as they felt they could better protect themselves from danger. Similarly, in a Toronto-

based program for women survivors of violence that combined boxing and more traditional counseling, participants noted that they benefited from having a physical way to release emotion and work through their trauma (van Ingen, 2011). Although simultaneous macro-level efforts are needed to curb violence against women, such interventions speak to the potential healing effects of physical activity.

Relatedly, scholars have examined how activities that focus on mind-body-environment integration, such as particular forms of dance and yoga, might help reduce the symptoms of the aforementioned mental health issues. In their research focused on military veterans, for instance, Mattocks and colleagues (2012) found that participants reported that engaging in activities such as running and yoga helped them to cope with the trauma associated with combat or sexual assault. Similarly, Moe (2014), when studying women's participation in belly dance, found that over 30% of her participants, unprompted, described their experiences with violence or trauma (see also Hurd Clarke & Griffin, 2008). For them, belly dancing was a way to reconnect with their bodies on their own terms, and in a way that felt empowering to them. Similarly, yoga has also been found to help promote myriad positive mental (and physical) health outcomes, including, but not limited to, increased body awareness, positive body image, improved mood, stress relief, and anxiety reduction (Harner, Hanlon, & Garfinkel, 2010; Mahlo & Tiggemann, 2016; Ross & Thomas, 2010). Mensinga (2011) even suggested that social work education incorporate yoga to help future practitioners better understand how emotions and trauma are embodied in their own bodies, as well as those of their clients.

Similarly, researchers in physical cultural studies/sport sociology and social work have found that (active) leisure pursuits, such as recreational running, dance, rowing, swimming, and tai chi, among others, can provide women with mental health issues such as depression with meaningful ways to recover (Caudwell, 2009; Fullagar, 2008a; Leedy, 2009). In her autoethnographic account of depression, Caudwell (2015) described the benefits she derived from something as “mundane” as indoor rowing. One of the five participants in Leedy’s (2009) study on women’s therapeutic use of running also described how she found running to help her cope with her mental illness. As explicated by Fullagar (2008a), at times, the use of physical activity or leisure among people with mental illness can go beyond symptom reduction, but contribute to a more holistic sense of well-being, identity, and embodiment.

This line of inquiry is not without precedence, however, as feminist therapists and sport and exercise psychologists have promoted the use of physical activity in their practice with women since the early 1980s. Therapists Dohrmann Rindskopf and Gratch (1983)—some of the first scholars publishing on this topic—described the ways in which they used exercise to help women clients (re)connect with their body, and gain strength, endurance, and tolerance for pain: necessary components for women to physically and mentally be able to handle the rigors of activism. In addition, participating in shared exercise experiences lessened the power differential between therapist and client, and post-workout group reflection acted as a conduit to discussing more deeply personal topics related to one’s body. In 2002, Chrisler and Lamont—in a special issue of the academic journal, *Women & Therapy*, dedicated to

the topic—convincingly reiterated Dohrmann Randskopf and Gratch’s calls, arguing that feminist therapists could (and perhaps should) weave physical activity into clinical practice with women as it can serve as an empowering experience, helping women appreciate the way their bodies move as opposed to look, obtain a plethora of health benefits, and engage in pleasurable, fun experiences that are more often offered to men as opposed to women.

Such scholars and therapists, however, taking into account the societal imperative for women to be thin and toned, cautioned therapists to monitor clients for excessive exercise or eating disorders (Chrisler & Lamont, 2002; Leedy, 2009). Scholars in fields such as sport sociology, sport and exercise psychology, and critical public health and psychology have raised similar concerns about the possible negative consequences of exercise as a way to help women with mental illness. Researchers have found that many women and girls equate health with appearance, and engaging in physical activity is frequently undertaken as a way to look a certain way, as opposed to achieving more holistic benefits (Liimakka, 2011, 2014; Strelan, Mehaffey, & Tiggemann, 2003). The engagement in exercise for fitness or aesthetic reasons has been found to contribute to health problems in women such as disordered eating and excessive exercising. Liimakka (2011) found that not only was the relationship between health, appearance, and exercise intertwined for the women in her study, but many noted that their fitness routines could quickly become obsessive, due to the pressure for women to conform to gendered appearance norms.

It is not just recreational exercisers who are at risk of developing unhealthy relationships with exercise or one’s body image; competitive athletes are prone to this

as well. For instance, the athletes in Krane and colleagues' (2001) study expressed similar concerns regarding the relationship between performance and appearance. Many of the women they interviewed recalled feeling proud of not only how their bodies performed, but the way they looked. While feeling pride in one's appearance is certainly not bad in and of itself, the authors believed that some participants had developed sub-clinical eating disorders as they would punish themselves, often through excessive exercise or reduced food intake, for indulging too much. Adding to this, Guthrie (2005) found that the lesbian athletes in her study developed eating disorder symptomology, not only in a pursuit to become better athletes; rather, for some participants, this was further complicated by internalized homophobia: in order to not appear gay, the women would go to great lengths to achieve a (hetero)feminine appearance through exercise or other means (see also, Jones & Malson, 2013). This highlights a way in which gender intersects with other identities to affect one's (mental) health and relationship to physical activity.

At times, the desire to lose weight is intertwined with athletic performance goals. As an example of this, Zanker & Gard (2008) described the experience of Lindsey, a woman who strongly identified as a competitive runner from an early age. In diary entries throughout her life, Lindsey recalls the obsessive desire to maintain an incredibly low weight, coupled with an intense training routine, so as to maximize her performance. At the time of the study, Lindsey was in her 40s and had to cut back significantly on her running as she was continuously suffering injuries. Many of the participants in Thorpe's (2016) study of women who had experienced exercise-induced amenorrhea expressed similar relationships with food and exercise.

Excessive exercise routines, coupled with restricted eating, was considered to be part of what it took to be a high-performing athlete. This, in a way, masked the disordered (and damaging) nature of the participants' relationship with food and fitness (see also, Heywood, 2011). Unfortunately, the idea that one must restrict food or lose weight in order to perform well in sport is taught to girls (and perhaps boys as well) early in life. As an example, the girls in Rich and Evans' (2005) study on disordered eating within schools recalled being told by physical education teachers that their athletic performance would improve if they lost weight.

Excessive exercise or exercise addiction has also been examined by critical scholars who place the behavior within the larger social context. Schrieber and Hausenblas (2015) provide a contextualized overview of exercise addiction and its intimate connection to the (aforementioned) morality associated with being physically active in terms of assumed character traits (e.g., hard-working) and health status, as well as appearance. Many people who engage in excessive exercise do not view it as a problem, in part due to its acceptance, if not valorization, within Western societies (Cox & Orford, 2004). Similar to anorexia, however, exercise addiction is often tied up in a need to control one's body—as controlling other aspects of his/her life may not be possible—and for some, can be used as a form of self-harm (Bamber, Cockerill, Rogers, & Carroll, 2000). As an example, and returning to Mattocks and colleagues' (2012) work on trauma among military veterans, while many of their participants used physical activity as a healthy way to cope, or a form of self-care, for some, it became an addiction and compromised their health. One participant noted: “You know they [military] always taught us to exercise. So when I returned, I would

exercise to excess and really to excess to the point where I would be sick...Exercise was my addiction and I was constantly throwing up. I got super skinny” (p. 542).

Interestingly, while there is a large body of work on the negative, or complicated relationship between physical activity (culture) and women’s body image, increasingly, scholars are finding that particular physical activities can help women with eating disorders such as anorexia nervosa or bulimia. Historically, physical activity was largely absent in the treatment of eating disorders—particularly in hospital or clinical settings. The fear being that individuals would abuse exercise, or it would negatively affect efforts to regain weight (Moola, Gairdner, & Amara, 2013). However, in a review of the literature on the use of physical activity among people with eating disorders, Moola and colleagues (2013) found that such concerns were unfounded: Carefully monitored physical activity did not interfere with weight gain, was well-tolerated, and, overall, a valuable part of the recover process. Similarly, in her autoethnography, Axelsen (2009) described how becoming a competitive triathlete helped her to better manage—if not recover from—from her eating disorder. As opposed to some of the previously mentioned research in which athletes desired to lose weight to perform well, Axelsen (reluctantly) gained weight in order to keep up with the demands of her rigorous training.

Similar to the previously mentioned work on physical activity for women with histories of trauma, activities such as yoga, outdoor physical activity (e.g., rock climbing), or skill-based sports such as skateboarding, can teach women with eating disorders to appreciate their bodies for what they can do, as opposed to how they look (Duesund, & Skårderud, 2003; Kessell, 1994; Moola, Gairdner, & Amara, 2013;

Bratland-Sanda, et al., 2009). It can also act as a distraction from their food obsessions, provide them with social support (social relationships are often compromised when one has an eating disorder), teach them new skills, and provide a source of self-esteem. There are now calls for physical activity to be incorporated into inpatient and outpatient treatment for women with eating disorders (Moola, et al., 2013; Bratland-Sanda, et al., 2009).

This is not to suggest that the relationship between eating disorders and physical activity is not without complexity (Kolnes, 2016; Kolnes & Rodriguez-Morales, 2016; Moola, Gairdner, & Amara, 2015). In Moola and colleagues' (2015) qualitative interviews with women with eating disorders, participants noted that engaging in physical activity when recovering from an eating disorder had to be contingent upon where one was in the recovery process. While the majority of participants were proponents of eating disorder programs allowing clients to be physically active, they believed that re-introducing physical activity too soon could compromise treatment goals. Even embodying physical activities, such as yoga, which some researchers suggest can help prevent against negative body image or improve positive body image, can be misused (see, for instance, Musial, 2016).⁹

Critiques of “Exercise is Medicine”. Based on the previously mentioned literature, it is clear that physical activity can play a beneficial role in preventing or helping to treat mental health issues. However, the promotion of physical activity for mental (and physical) health purposes—especially when labeled as a “medicine” or incorporated into government or major public health initiatives— is not without

challenges. In what follows, I provide an overview of some of the critiques of such exercise promotion.

As explained in the Introduction, physical activity or exercise is increasingly being promoted as a form of medicine. This is based on the belief that regular engagement in physical activity can help to prevent or mitigate a range of chronic illnesses including, but not limited to, diabetes, heart disease, osteoporosis, depression, and anxiety disorders (Berryman, 2010; Sallis, 2009). While the idea that physical activity has salubrious properties dates back to the days of Hippocrates (Berryman, 2010), exercise as a type of medicine is being increasingly institutionalized. In the early 1990s, Western nations such as the UK and Australia developed exercise referral schemes as a way of encouraging the prescription of physical activity (e.g., Sowden & Raine, 2008). Since then, there has been an avalanche of similar public health programming in Western nations focused on creating a more physically active population in the name of health. Michelle Obama's Let's Move! campaign, the U.S. National Park Services' Healthy Parks, Healthy People program, UK's Designed to Move, the global Exercise is Medicine (EIM) initiative, and the Active Living Movement are but a few examples.

While the promotion of physical activity in an effort to improve health is a laudable goal, scholars have raised various concerns regarding the effectiveness of exercise as a form of medicine. Beedie and colleagues (2016) argued that while there is an abundance of evidence showing that exercise can be efficacious in improving one's health, there is a glaring lack of research on its effectiveness. In other words, while people may engage in physical activity and show improvements in the form of

various health outcomes in ideal settings, it is less clear to what extent clinical improvements result in the “real world”. Most often, the research that is showing the efficaciousness of physical activity is lab-based, highly-monitored, and conducted on volunteers who are not experiencing co-morbidities (i.e., the co-occurrence of more than one major health issue) (Glasgow, Lichtenstein, & Marcus, 2003). Developing programming and interventions in community settings in order to help people experiencing a variety of health problems is less clear-cut, and time and money-intensive (Faulkner & Taylor, 2009).

The effectiveness of exercise referral schemes has also been questioned. Sowden and Raine (2008) posited that the exercise referral schemes were initiated, and widely promoted, due to political agendas, as opposed to an adequate evidence base showing that prescribing exercise is a way to improve the health of individuals and populations. In fact, they noted that research conducted after the schemes were already in place revealed that their effectiveness was limited, but at that point it was too late to turn back. Similarly, other scholars found that adherence to exercise referral schemes (mostly in the UK) are relatively low and most likely not cost effective (Pavey et al., 2012; Williams et al., 2007). Uptake of exercise prescriptions is especially low for marginalized groups of people, including women, people living in rural areas, and people with mental illness who face substantial barriers (e.g., time, energy, motivation, self-esteem, money) to being physically active (Crone et al., 2008; James et al., 2008). Arguably, the most oppressed populations are in greatest need of public health interventions, yet, exercise promotion—like other public health efforts (Popay, Whitehead, & Hunter, 2010)—seem to disproportionately help those

with the most privilege (Malcolm, 2016). Oliver and colleagues (2016) argued that one reason for such low adherence is the top-down nature of such programs. In other words, programs aimed at getting people with chronic health issues more active are more often than not formed by government officials or public health specialists, as opposed to the population to whom they are targeted (Henderson et al., 2017; Oliver, Hanson, Lindsey, & Dodd-Reynolds 2016).

Another potential reason for the low adherence to physical activity-related health promotion programming is the dearth of long-term, rigorous interventions needed to help those who are the most physically inactive. With regard to the UK's exercise referral scheme, for instance, Dugdill, Graham, and McNair (2005) argued that mostly short-term exercise interventions were provided, which they found did not necessarily lead to lifestyle changes, or promote an enjoyment of physical activity. For the most marginalized individuals, such as people with mental illness, exercise interventions are "complex" and require substantial funding, careful planning, and proper evaluation (Faulkner & Taylor, 2009). Yet, many public health programs focused on physical activity do not provide adequate resources to help people become more physically active. Bercovitz (2000), for instance, argued that Canada's Active Living initiative, which encourages people to be more active by incorporating physical activity (i.e., not necessarily exercise) into their daily routines, but does not provide additional government funding to help the population be more active. Similarly, as noted by Jette, Bhagat, and Andrews (2016), public health programming is increasingly taking the form of public-private partnerships that link "health" with consumption and personal choice. For example, the US-based Let's Move! campaign,

formed by former First Lady, Michelle Obama, is sponsored by several major corporations that are fostering corporate goodwill through their support of programming that focuses primarily on lifestyle changes with minimal macro level changes needed for marginalized communities to be more active. In addition, such sponsors are putting forth “healthier” products (alongside their less-nutritious options), leaving it up to the consumer to choose the more nutritious product in pursuit of a healthy lifestyle.

Such emphasis on personal responsibility for health is a hallmark of the “new public health” (Petersen & Lupton, 1996, title) and can be seen to permeate physical activity-related public health efforts (Bercovitz, 2000; Fullagar, 2002, 2003, 2017; Jette et al., 2016; Malcolm, 2016; Neville, 2013; Piggin, 2014). Many of the chronic conditions public health officials are trying to remedy or prevent through physical activity are, in large part, the result of social injustices (e.g., poverty, structural racism, sexism, or heterosexism, etc.), yet, instead of redressing them on the macro level through policy or institutional change, the focus is on getting individuals to become more self-managing, productive citizens (Fullagar, 2017; Jette et al., 2016; Malcolm, 2016; Neville, 2013; Williams & Gibson, 2017). In line with healthist ideology (Crawford, 1980, 2006), people who fail to achieve a certain level of health, or at least appear healthy through such individual efforts, are viewed to be not only responsible for their condition, but morally reprehensible. Fullagar (2002, 2003), in critiquing Australia’s Active Living movement, described this as a form of governmentality in which populations are controlled through political agendas.¹⁰

The discourse surrounding physical activity promotion for health also takes for granted the idea that physical activity is always health-enhancing. Neville (2013) critiqued the Exercise is Medicine initiative for its simplistic linking of fitness with health, which ignores the, at times, unhealthy aspects of exercise (see also: Fullagar, 2017; Malcolm, 2016; Piggin, 2014). Malcolm (2016) describes this as the sport-health ideology, and argues that the costs of sport-related injuries are often glossed over or ignored in exercise promotion initiatives. Counter to the goals of exercise is medicine programming, engaging in sports or over-exercising can lead to ill-health and contribute to healthcare spending (Malcolm, 2016; White, Young, & Gillett, 1995). Guskiewicz (2011) suggested reframing “Exercise is Medicine” to “‘safe’ exercise as medicine”. While this messaging brings attention to the potential harmful effects of exercise, some have argued that it does not go far enough in challenging the idea that exercise should be described as a type of therapy or medicine in the first place (Caddick & Smith, 2017; Fortier, Guérin, & Segar, 2016). As Fortier, Guérin, and Segar (2016) explained, when physical activity is positioned as something one takes, as they would a pharmaceutical, it can turn people off from being physically active. Caddick and Smith (2017) made a similar argument in their discussion of Exercise is Medicine for military veterans with PTSD. They noted that aligning exercise as a form of treatment can make veterans (and others) who feel stigmatized receiving mental health treatment less likely to seek help. Describing exercise as a type of medicine also positions it as something that is to be carefully monitored, regulated, and calculated, obscuring the potential pleasures associated with movement

(Hotchstetler, 2014), or the way that being active can produce a different way of knowing one's self (mind-body connection; Fullagar, 2002, 2003).

Moving Forward. While scholars have noted that exercise as a form of medicine has become commonplace in Western nations (e.g., Fullagar, 2017), there has not been a systematic analysis of the types of the dominant narratives related to exercise as medicine for mental illness. Therefore, it is important to identify the dominant discourses or narratives pertaining to exercise as a treatment for mental health. Beyond simply citing what the various discourses are, examining *why* it is that these narratives are present and rendered meaningful is imperative if we hope to intervene in a substantive way. In other words, the discourse related to mental health and physical activity will not change if the sociocultural, economic, political, and technological factors that come together to form the current context in which exercise is medicine is intelligible are not known. Only with this understanding can the linkages between such factors be rearticulated in order to provide a different, or more nuanced account of physical activity's potential as a therapeutic. In my first empirical chapter, I seek to identify the dominant narratives related to exercise as medicine for mental illness, as well as map the context of this trend. This chapter is therefore guided by my first (previously stated) set of research questions:

RQ1: What are the dominant narratives related to physical activity as a mental health treatment? What political, social, economic, technological, and cultural factors come together to create the context in which such narratives circulate and are rendered intelligible?

In addition, there remains a dearth of literature examining how public health programs, such as the Exercise is Medicine initiative, incorporate mental illness into their agenda. Specifically, it is important to understand to what extent such programs makes physical activity more accessible to people with mental illness, including the provision of educational materials and resources for healthcare providers, exercise specialists, and the lay public, as well as more structured programming and infrastructure needed for this population to participate in safe, meaningful, and therapeutic forms of exercise. To date, there has not been a thorough examination of the US's Exercise is Medicine initiative. In fact, the majority of the aforementioned critiques of the "exercise is medicine" ideology and programming has come from other Western nations, such as the UK and Australia.¹¹ I seek to address this shortcoming in my second empirical chapter by answering my second research question:

RQ2. How is mental illness addressed by the Exercise is Medicine initiative?

Lastly, while it has been established that physical activity can play a meaningful role in individuals' recovery from mental health issues, such as depression, the role of physical activity in the lives of people with OCD remains unclear. As OCD is closely related to exercise addiction and eating disorders, it is particularly important to better understand the way physical activity may improve, or exacerbate, the symptoms of OCD. In addition, gender norms, expectations, and subjectivities affect the lived experience of mental illness, as well as physical activity experiences, such that focusing specifically on the exercise experiences of women with OCD—the focus of my third empirical chapter—will contribute to the extant

literature on the intersection of gender, mental health, and physical activity. This final empirical chapter is informed by my third set of research questions:

RQ3. What are the exercise experiences of women with OCD? To what extent do they find physical activity to contribute to their mental health? What are the shortcomings of physical activity in reducing their symptoms, as well as the barriers to engagement in physical activity?

Chapter 3: Methods

In an effort to answer my research questions, I have conducted three different examinations related to the use of exercise as a therapy for mental illness: 1) a contextual analysis of dominant discourses related to the therapeutic benefits of physical activity for mental illness present in newspapers, magazines, government documents and websites, public health initiatives, and social media; 2) an examination of the Exercise is Medicine website, which represents a popular US public health initiative related to promoting exercise as a form of medicine; and 3) a qualitative analysis of the exercise experiences of women with OCD. The three different analyses focus on different scales or levels, with the document analysis focused on the macro level, the Exercise is Medicine website as a meso-level initiative, and the women's experiences exercising with OCD representing the micro level. Such a scalar approach allows for a more thorough, dynamic, and crystallized understanding of the exercise is medicine phenomena.

There is no straightforward or prescribed way of answering these questions. Instead, as with many qualitative projects, the researcher must determine what to examine, utilizing a diversity of tools (King, 2005). The emphasis is not on religiously following a prescribed method (often referred to as methodoltry; Sandelowski, 1997), but making logical and informed decisions in crafting a story that advances knowledge on the topic. While I utilize specific analytical frameworks in each section to interpret data (e.g., thematic analysis), my research is informed more broadly by the cultural studies approach of radical contextualism, and the method of articulation (Andrews & Giardina, 2008; Grossberg, 2010; Slack, 1996).

Articulation, as discussed in Chapter 2 can be considered a theory in that it provides a framework for understanding why it is that particular phenomena exist and are imbued with meaning(s) within a given conjuncture. Articulation, however, can also be considered a method (Grossberg, 2010; King, 2005; Slack, 1996). In order to better understand the existence and effects of, in this case, the promotion and use of exercise as a form of therapy, the various social processes that come together to produce exercise is medicine must be mapped out. In other words, as my research question asks, what social, cultural, ideological, economic, or technological forces create the context in which exercise is medicine is rendered meaningful? However, the context is not formed solely by such forces, but by individuals' engagement with them. As noted by cultural theorists (e.g., Hall, 1986), social processes are not causal in their meanings and effects, but are taken up, resisted, or reconfigured in various ways by people, often depending on one's social location. The making of the given context, in other words, is shaped both by larger social and structural forces, as well as individuals' actions. The way people relate to particular ideologies or discourses is not guaranteed or fixed; it cannot be known in advance (Hall, 1986). In this way, it is important to focus not only on the macro and meso level processes that shape the current conjuncture, but the lived experience of exercise as medicine, as well.

It is also important to note that this research project is not seeking to find "the" or "one" absolute truth related to the exercise is medicine moment. As conjunctureally-mediated multiple realities exist, beyond that which humans readily observe (e.g., Bhaskar, 1989), it follows that the epistemological assumptions recognize the partial, ever changing, always incomplete understandings that can be

derived from any given research project. Haraway (1988), for example, noted that it is impossible to generate a universal truth or complete objectivity, but only partial truths from subjects speaking from particular vantage points. Additionally, she emphasized the futility of lapsing into a complete relativist account of knowledge—i.e., that there is no “truth” as we are limited by equally valued subject accounts of reality—stating that such relativism holds nobody “accountable” or “responsible” and offers false promises of equality (Haraway, 1988). In what follows, I provide details related to the methods used in each of the three parts of the overall study, also including a section on ethics and reflexivity.

1. Exercise is Medicine: Dominant Discourse Analysis

In the first empirical chapter of the dissertation, I identify the dominant discourses related to exercise as a potential mental health treatment, and discuss why it is that such messages are given meaning within this current context. In order to arrive at an empirically-informed understanding of the dominant discourses related to mental illness and physical activity, I conducted a systematic analysis of a variety of documents related to the therapeutic use of physical activity. Conducting a thematic analysis (described below) of these documents allowed for a higher degree of assurance that the identified discourses could indeed be considered some of the more dominant narratives in this current moment. To be sure, however, I am not suggesting that the discourses identified are the only discourses that are circulating, or that my search is exhaustive.

Data collection and sample. In order to identify and assess the dominant discourses related to promotion of exercise as a mental health therapy in America and

other Western nations, I collected digital content in the form of newspaper and magazine articles, government documents, public health initiatives, and social media posts. The rationale for focusing on these sources is that they are readily available to the lay public as well as healthcare providers. To locate newspaper and magazine articles related to mental illness and physical activity, I conducted numerous searches using Lexis Nexis and The Reader's Guide to Periodical Literature. The searches took place between July 2016 through February 2017. I first began by focusing specifically on OCD and physical activity, which corresponds to the empirical focus of my interview data. Using Lexis Nexis, I used key terms OCD AND Physical Activity. With filters that excluded articles of high similarity, and including only newspaper articles (i.e., law documents and other content that was not applicable was excluded), the search yielded 149 articles. Articles were included in the final analysis if they met inclusion criteria, which focused broadly on how physical activity could be used to help people with OCD, how it could harm people with OCD, or any other account of how somebody with OCD experienced physical activity. Articles were excluded if they did not meet the inclusion criteria. Of the 149 articles, 53 met the inclusion criteria and were analyzed.

From there, in order to ensure my search was comprehensive, I expanded the Lexis Nexis search, using the search terms: (obsessive compulsive disorder or OCD) AND (physical activity OR exercise OR fitness OR sports). This yielded just under 1,000 hits after eliminating sources that were not newspaper articles, as well as articles that were of high similarity. After reviewing for inclusion criteria, roughly 305 articles were included in the final analysis.¹² When combining with the

previously mentioned OCD search, all together, around 358 articles focused on OCD and physical activity were analyzed.

After analyzing the OCD articles (to be discussed below), I conducted additional searches for popular press articles. I expanded the search in order to examine if the initial themes I came up with during the first round of analysis, which focused on OCD articles only, would change with the inclusion of articles focused on different mental illnesses, or mental illness more generally. I also chose to use a different search engine, EBSCO, as it generated more magazine articles, and resulted in a more manageable number of hits—from mostly well-read magazines and newspapers, such as the *Wall Street Journal*, *New York Times*, and *Yoga Journal*, to name a few—compared to Lexis Nexis. I began by using a combination of key words including Mental illness, Depression, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Bipolar Disorder, Post Traumatic Stress Disorder, Schizophrenia AND Physical Activity, OR Exercise. I conducted two searches for each of the above combinations: First, I included only hits from the EBSCO database, The Reader's Guide to Periodical Literature (magazines only). From there, I expanded to *all* EBSCO databases, and narrowed it down to newspaper articles only. Duplicates were eliminated from the data set, as were articles that: 1) did not focus on humans; or 2) did not, at some point, focus on physical activity or exercise as it related to mental illness. In all, roughly 102 articles were included in this second round.¹³ (See Appendix A for a chart of searches and number of hits.)

Analysis. My analytic strategy was informed by the aforementioned contextual analytic approach, as well as thematic analysis. According to Braun and

Clarke (2006), thematic analysis is a general qualitative method in which data is analyzed with attention to patterns or similarities, which are broadly defined as themes. Themes are derived after thoughtful and rigorous engagement with the data, which may include reading over textual data segments (e.g., interviews), note taking, memo-ing, coding, diagramming, debriefing, or other strategies to think through and organize data. Too often, qualitative researchers describe themes as “emerging” from the data. The themes do not emerge, but are actively constructed by the researcher based on patterns they identify in the data. The patterns that are identified are largely unique to the individual researcher’s biases, understanding of the literature, or theoretical commitments (Braun & Clarke, 2006). The themes help to answer the research question, and tell a story based on the researcher’s interpretation of the data (at least in the case of inductive analysis; Braun & Clarke, 2006).

For this study, after gathering the documents related to physical activity and OCD, I read through each article closely, and took notes on the key points, or information that stood out to me. At first, the note taking was more of a summary, but as it went on, it became more analytical as I began to see recurrent patterns and took note of these. Analysis during the data collection phase allows for greater rigor as researchers are able to make adjustments to their data collection strategies, verifying particular emerging themes as additional data is collected (Morse et al., 2002). After all of the data had been collected and notes taken, I continued to immerse myself in the data by re-reading my notes and debriefing with my advisor regarding the patterns I had identified in the documents. I organized the data into three main themes or

dominant discourses, and presented my initial findings at a conference, which served as another form of debriefing as I was able to receive feedback from the audience.

While I was particularly interested in OCD as it is the focus of my third empirical chapter, I decided to expand my analysis to include documents related to mental illness, more broadly. This decision was made, in part, because I was (pleasantly) surprised by how the OCD documents I reviewed were relatively nuanced in comparison to some of the messages pertaining to physical activity and mental illness that I had come across (e.g., those that positioned exercise as a “cure”). While this was refreshing, at the same time, I knew I was not capturing all of the dominant messages related to the exercise is medicine phenomena, and, therefore, my research would not be incomplete and less valid if I were to only include documents related to OCD. As noted above, I went on to collect documents focused on mental illness more generally, and analyzed these documents in the same way as the OCD articles. The initial themes I came up with for the OCD analysis inevitably informed my thinking in this next round of analysis; however, I remained open to narratives that did not fit into my pre-existing themes, and ended up revising the themes accordingly (i.e., adding new themes, revising existing themes, etc.).

Once I identified the dominant narratives, I moved to the more explicit contextual analysis. In other words, I mapped out the various social forces that come together at this particular moment in America and other Western nations that give such narrative meaning. Identifying the dominant narratives provided empirical material that informed this mapping. After I decided on the previously mentioned themes, I reflected on why it is that such narratives are meaningful at this given

moment. Informed by the academic literature, I came up with five sociocultural, economic, ideological, political, or technological forces that I believe explain this. This is by no means an exhaustive or definitive list. In addition, as all research findings are actively constructed by the researcher, this analysis is based on my interpretations and subjectivities (King, 2005).

2. Exercise is Medicine Website Analysis

The second empirical chapter examines a highly visible exercise promotion initiative, Exercise is Medicine (EIM). EIM, which was formed in 2007 as a joint effort between the American Medical Association (AMA) and American College of Sports Medicine (ACSM), encourages healthcare providers to prescribe exercise or physical activity as they would pharmaceuticals to prevent or treat a range of chronic health issues. While the health benefits of physical activity are increasingly being promoted (as will be detailed in the first empirical chapter), it is less clear to what extent public health initiatives, such as EIM, provide information, resources, or programming related to mental illness that would make physical (potentially) more accessible to this population.

In order to answer this question, I conducted a qualitative analysis of the EIM website. The website was chosen as the main data source as it is arguably the most visible, easily accessible, and comprehensive resource provided by, and about, the EIM initiative (see Fullagar, 2008b, and Piggin, 2014, for similar sport or public health-focused website analyses). The content on the website was systematically examined in February of 2017, and again in October of 2017. The information provided on the website is grouped under seven main headings found on the main

homepage. There are sub-headings under each main heading, and second level sub-headings for many of the sub-headings (see appendix B for an overview, and appendix C for sample images of the website layout). When you click on a heading, sub-heading, or second level sub-heading, you are directed to a page with text, links (many of which direct you to a different part of the website), and resources (e.g., outside websites, presentations, academic articles, etc.). I started my data collection and analysis with the heading on the far left of the page (*About*). I began by reading all of the content listed—and linked to—the main heading, before moving onto the subheadings, and sub-sub headings. As an example, I first read over everything in the *About* section, then moved onto the sub-heading *The EIM Solution*, and then the second level sub sections (*Healthcare Stakeholders*, *Community Resources*, *Physical Activity Digital Health*; Appendix B and C).

While analyzing the content provided on the site, I read through the content carefully, and took notes as I went along. I focused on information that pertained specifically to mental illness, such as the *Your Rx for Health Series*, which provided a two-page handout on the relationship between physical activity and anxiety and depression. In addition to content that explicitly addresses mental illness, I was also attentive to what was not included on the website, or the gap in information or resources related to mental illness. As an example, it struck me while going through the site that there was little attention to creating fully funded, substantial macro-level changes that would make it easier for marginalized communities, such as people with mental illness to be physically active. In this way, my analytic approach was informed by my theoretical framework, as well as the extant literature on physical

activity and mental illness (e.g., what factors help make physical activity more enjoyable or sustainable for people with mental illness; barriers to physical activity engagement among this population, etc.). In addition, I was also interested in seeing to what extent findings from my first empirical chapter (i.e., dominant discourses related to exercise as a therapy) were taken up in the EIM materials.

After going through the website and taking notes, I conducted a thematic analysis (Braun & Clarke, 2006). Similar to the process described for my first empirical chapter, I read through my notes, looking for patterns or similarities in the content provided. However, the website analysis differed in that there was less content to analyze; in fact, one of the main findings was based on what was *missing* from the website. My intention when analyzing the data and identifying themes was to put forth suggestions that could help the EIM initiative improve. Rather than being overly critical for the sake of critiquing, I sought to balance constructive critiques with ways to move forward. This approach is in line with physical cultural studies' focus on producing research that can make a difference (e.g., Silk & Andrews, 2011; see also, Sandelowski, 1997).

3. The Exercise Experiences of Women with Obsessive-Compulsive Disorder

The first two empirical chapters focused on the macro and meso levels, respectively, identifying the dominant discourses that circulate related to exercise as a therapy, as well as the way public health initiatives, such as Exercise is Medicine, address mental illness. The third empirical chapter builds upon these analyses by narrowing to a micro level to examine how women with OCD experience physical activity, with a specific focus on the ways in which movement can help, or hinder,

their management of OCD symptoms. Connecting this to the first two empirical chapters, attention is given to how participants seem to incorporate, or resist, dominant narratives related to physical activity and mental illness. As noted in Chapter 4, the Exercise is Medicine movement is not simply imposed by the government or powerful corporations, but instead, in a dialectical fashion, shaped or reproduced by the lay public. Understanding the lived experience of OCD will also help with the development of more appropriate messaging and programming related to OCD and physical activity. In order to understand the exercise experiences of women with OCD, semi-structured interviews were conducted with 14 women who self-identified as having OCD. This analysis was guided by thematic analysis (Braun & Clarke, 2006). I detail the specifics of the research process below.

Sample. A convenience sample of 14 women who self-identify as having OCD was chosen using purposive sampling techniques (Thorne, 2008). Criteria for participation included being 18 years of age or older, self-identifying as both a woman and a person with OCD, and willingness to participate in two interviews. The decision to include women who self-identified as having OCD, as opposed to those who had been diagnosed with OCD, was made in an effort to include women who may not have sought treatment from mental health professionals and therefore received an official diagnosis. Additionally, scholars have critiqued the use of diagnostic criteria as it is often used to pathologize people (e.g., LGBTQ individuals, women, people of color), and boundaries of what constitutes as particular illness are fuzzy (Cermele, Daniels, & Anderson, 2001). However, diagnostic labels can also be useful as they give a name to a set of symptoms, potentially legitimizing individuals'

suffering. It can also lend itself to the creation of community (Martin, 2001). Focusing on those who self-identify as having OCD also allowed me to ask specifically about how they came to identify with this illness (e.g., what informed this decision, with regard to both embodied suffering and their preconceived understandings of OCD).

Purposive sampling was used as I wanted to ensure that I included women who had symptoms that had, or continued to, interfere with their lives, as well as those with different manifestations of OCD (see Appendix D for a table of participants' OCD symptomology). I wanted to focus on women with more moderate to severe OCD as women with less severe symptoms may not have had to seek out treatment. The first participant I interviewed fell into that category, and the data collected was rather superficial as a result (although it was an interesting data point that she self-identified as having OCD). After that, I began screening for women who (seemed to) have more intense symptoms, as indicated on their screening survey responses (discussed in more detail below).

In addition to the severity of symptoms, I was also interested in having participants with a range of different types of obsessions and compulsions. In that way, I was able to look for similarities and differences in how physical activity and other treatments may be affected by, or affect, particular obsessions and compulsions (e.g., hair pulling compared to hand washing or excessive exercise as a compulsion). I also tried to have some variety in terms of demographics (e.g., race, sexuality; see Appendix D) in order to see if individuals' experiences might be affected by the

intersection of OCD and gender as well as race or ethnicity, sexuality, or other identities.

Relatedly, one of the reasons I chose to interview 14 people was, in part, due to logistical constraints—money for compensation, time (most of the interviews were conducted in the summer when I was not teaching or taking many courses). Thorne (2008) notes that this is often the reality of study design. The sample size, however, was not arbitrary: researchers have suggested that 6-12 participants are needed for qualitative research that is not focused on generating theory (Guest, Bunce, & Johnson, 2006; Morse, 2000). This is the proposed number at which data saturation is achieved. Data saturation is considered to be the point at which new information gained through interviewing is not likely to lead to the development of new codes or themes.

Data collection. Data was collected through an online screening survey and two semi-structured interviews with each participant. Data collection took place in the Summer and Fall of 2013. Recruitment efforts included posting information about the study on a campus listserv, Craigslist, and Facebook, as well as distributing flyers in Silver Spring, MD, and the Northwest DC area at healthcare clinics, coffee shops, and outdoor infrastructure that acted as an informal community bulletin board (e.g., telephone poles). Women who were interested in participating emailed me, and I provided them with more information about the study, and sent them a link to the screening survey. The screening survey entailed questions about demographics, as well as the content of their obsessions and compulsions. It was used to: 1) inform the participants about the details of the study, and obtain initial consent; and 2) allow me

to make decisions about who to include in the study (mostly in terms of the content and severity of their obsessions and compulsions, but also race and sexuality).

The interviews focused on participants' experiences living with OCD (see Appendix E). The questions asked the participant to reflect on how OCD influenced various parts of their lives, from education to romantic relationships, as well as their coping strategies. While physical activity experiences is the main focus of this project, the women's relationship to physical activity cannot be fully understood without taking into account other aspects of their lives (as described in theoretical framework). In total, 14 different women were interviewed; the majority of the participants were interviewed twice, for a total of 26 interviews. One participant was not interviewed a second time as she seemed to have a very mild case of OCD (if it could be considered OCD at all); another participant was only interviewed once for logistical reasons (i.e., she graduated and moved away, and I ended up losing contact with her).

Analysis strategy. My analysis of the interview data is largely informed by thematic analysis, as described by Braun and Clarke (2006). Following each interview, I took notes (I call them 'participant notes') on what the participant said during the interview, as well as my thoughts on how the content speaks to the existing literature on women's mental health, physical activity, and related topics. Writing participant notes—also referred to by some as memo-ing—is a form of analysis, which helps to think through emerging themes, and allow the researcher to make changes to the interview protocol as needed. In addition, I also debriefed with my advisor within a few days of conducting most of the interviews. Such conversations

help me to process and synthesize data, and receive feedback on potentially relevant data points I may have missed. This process was also a form of analysis, which, in conjunction with writing participant notes, allowed me to make changes to my research questions or interview approach as I went. For instance, after the first few interviews, I began to ask additional questions as I heard participants mention similar topics that were not specifically asked about. This is a recommended type of member checking that helps to increase the rigor of the project (Morse, 2015). Instead of conducting research in a linear, step-by-step, cookbook-like way, recursively collecting and analyzing data, and making necessary changes in order to confirm or refute emerging themes, allows for a greater degree of validity (Morse, 2015; Morse et al., 2002).

As I interviewed participants, I also transcribed the majority of the 26 interviews verbatim. The interviews that I did not transcribe were transcribed by either a student intern, or a professional transcription company. I checked over the interviews that I did not transcribe to ensure as much accuracy as possible. Once the interviews were conducted and the majority of recordings were transcribed, I continued with data analysis focused on the women's experiences with physical activity. Data analysis took part in three stages, the first one taking place between September 2013-November 2013, the second between February 2014-May 2014, and the third taking place between February 2017-June 2017.

Data analysis: Stage one. The first stage of analysis (post-data collection) consisted of the development of initial themes. Once the data was collected, I read over all of the participant notes and transcripts in order to immerse myself in the data.

In reading over the data, I looked for patterns related to how the participants seemed to experience physical activity. I came up with three main themes. The purpose of this analysis was to familiarize myself with the data, continue with the analysis that began during data collection, and present preliminary findings at a research conference.

Data analysis: Stage two. Following the development of preliminary themes, I used the information gained in the first round of analysis to conduct a more systematic review of the data. After re-reading the transcripts, I developed a codebook consisting of codes that could be used to categorize segments of text. Examples of initial codes included categories such as barriers [to physical activity], facilitators, benefits, and so on. In addition, I met with my advisor and an undergraduate intern to discuss the codes. From there, two transcripts were selected, and all three of us separately applied codes to the text. We then met to discuss how we each coded, and revised the definitions or parameters of the codes as necessary. Although a point of contention, coding and establishing a degree of inter-coder reliability can help to enhance the rigor of certain qualitative projects (Morse, 2015).

Data analysis: Stage three. The third stage of data analysis picked up where I left off in 2014. I reacquainted myself with the codebook and interview transcripts, and then coded two transcripts in order to see if the codes I had developed in 2014 still seemed to fit. I made adjustments to the codebook as necessary, and coded all of the interviews with the updated codebook. After I coded each interview transcript, I also wrote a memo answering the broad question of “What did I learn?” (Maietta, 2017). Through this type of memo-ing, I was able to identify what was interesting or unique about the information shared during that interview. I identified and inserted

five to ten quotes that were particularly compelling, noting what was interesting or insightful about them. This allowed for a rich analysis of each participant, but at the same time, I was able to make connections between participants' experiences and identify similar patterns. This helped with the formation of themes.¹⁴

After completing the coding and memo-ing, I created diagrams for each participant (see Appendix F for an example). The diagrams were organized around some of the most informative codes (e.g., barriers, strategies, messages, loss, beliefs, limited effectiveness). Using Powerpoint, each of the chosen code names were put in individual blue boxes. Under each code name, in yellow boxes, were data from the participant's interview that corresponded with the code. For example, for participant two, under the code "Barriers" were six examples of barriers that she experienced when trying to be physically active (fibromyalgia, obesity, OCD obsessions, other mental illnesses, struggle/vicious cycle, perfectionistic thinking). Under those six barriers were additional information that further explained each barrier. Diagraming in this way allowed me to process and analyze the data from a different angle, providing a visual representation of the data.

Following the in-depth vertical analysis achieved from the coding, memo-ing, and diagramming for each individual participant, I went on to look at the data horizontally, or, in other words, across participants. To do this, I combined the data from the diagrams into a Word file. For example, I would have a code (e.g., Barrier) and all of the examples of barriers from each interview copy and pasted below the code. I then printed the Word file, and cut the individual data segments into strips of paper. I organized the codes and examples on my floor. Having strips of paper

allowed me to physically move around the data points, organizing them into themes and subthemes based on patterns and similarities.

Ethical Issues

One of the main ways in which institutional review boards (IRBs) seek to protect human subjects—and themselves from litigation—is through informed consent. The first page of the online screening survey consisted of the consent form. Participants were asked to read through the consent form, and acknowledge their understanding of what participation entailed (in terms of time commitment, potential risks, benefits, and compensation) by clicking on the appropriate box. They were not able to begin the survey before completing this. However, in order to ensure, as best as possible, that the participants had read through and understood the protocol, at the first interview, participants were asked to read over and sign another consent form. At that time, they were also encouraged to ask me any questions about the research. One participant did have some reservations following the first interview. She was concerned about how the data would be used, and requested a copy of the transcript. However, she agreed to participate in the second interview, and spoke for over four hours over the course of the two interviews.

Following the interviews, I checked in with the participants to see how they were feeling, and offered a reference sheet for local mental health services. All of the participants were well-versed in mental health care, with most—if not all—having received care in the recent past, so none of the participants requested the information. I did, however, have one post-interview ethical dilemma: During an interview, a participant disclosed that she had been feeling suicidal in the days prior, and alluded

to the fact that she may still be entertaining suicidal ideation. She was seeing a therapist, however, and noted that she had spoken with her therapist about this. Still, I felt uneasy not doing anything, so I called a suicide support hotline to ask for assistance. The woman I spoke with confirmed that since the participant was working with a therapist who was aware of the situation, there was nothing further that I could do. I did follow up with the participant a day or two later, and she seemed to be feeling better.

Relatedly, other steps were taken to provide participants' confidentiality. For instance, identifying information was omitted from the interview transcripts, including names (a pseudonym was assigned to each participant), specific locations, birth dates, and so on. The surveys with the participants' names and demographic information are kept separate from the transcripts. In addition, undergraduates who assisted with data analysis or transcription underwent Human Subject IRB training through the University of Maryland, and an amendment was made to the IRB protocol to reflect additional individual's involvement. Audio files and electronic copies of transcripts were stored on a password protected computer; hard copies of transcripts were stored in my (locked) home office.

Lastly, an often over looked ethical issue pertains to what benefits participants will derive from sharing their stories. As argued by Bay-Cheng (2009), it is imperative that research benefits the participants, and not just in a 'trickle-down' manner; for instance, the hope that participants will inadvertently benefit from the dissemination of the results, or that they will feel good having merely participated. Instead, the research must be designed in a way that makes it (more) likely that

participants will receive benefits from participating beyond the financial incentive. One of the examples she gave included designing qualitative research so that participants have a chance to think through and tell their whole narratives or stories, as opposed to focusing on bits and pieces of a particular phenomenon. Her own work on the development of the Sexual Life History Calendar is an example of this: This project allowed adolescents and young adults to fill out major events in their sexual lives using computer software. Upon completing this, many reported that engaging in this activity allowed them to (physically) see the good and bad of their sexual lives, and the direction in which they are moving (e.g., if they seem to be making more informed, empowered choices). The participants appreciated the ability to think through their sexuality as it relates to the larger context of their lives. The use of different methods may not allow for such contextualization and benefits to the participants.

I attempted to do something similar in this research by forming the interview protocol in a way that allowed for participants to have an opportunity to tell their ‘whole story’ about how OCD impacted their lives. It was my hope that this would have the impact that it did on Bay-Cheng’s participants, as opposed to simply asking them specifically about their physical activity experiences and not allowing for greater contextualization. One participant did note that she liked how, through the two interviews, we touched on just about everything related to OCD and her life. Others were appreciative that somebody was conducting research on this topic, as they felt that there was little attention dedicated to such issues.

I still struggle, however, with how this research can have even more of an impact. Lather (1986a, 1986b) argued that the extent to which participants' may benefit from research is a way in which the validity ("catalytic validity") is determined. In this way, it is both an ethical issue, and a way to measure the quality of a research project. As I noted earlier, my hope is that by publishing this data in public health and kinesiology journals, this data will be used to inform program development, and potentially change the messaging related to physical activity and mental illness. Ideally, it could help to change the discourse around physical activity and mental health by providing more caution in terms of its supposed benefits. This is far from guaranteed, however, when publishing in an academic journal. The chances are high that few people will even read the article. As such, scholars have suggested presenting data in more accessible ways, such as through blog posts or op-eds (Bay-Cheng, 2016), in an attempt to reach a broader audience. This is something that I could do with data from this project.

Reflexivity

Being reflexive during the research process is essential to not only being ethical, but producing quality data. Reflexive practices take place throughout the research process (Finlay, 2002). Prior to beginning the research, I undoubtedly had biases: I was in a social work program where there was great attention to alleviating people's suffering. When moving to a kinesiology program where colleagues in exercise physiology neuroscience sub-disciplines made comments about exercise being a cure for depression, and other de-contextualized, inaccurate accounts of the potential of physical activity as a therapy, I was enraged. I know many people with

mental health issues, and for the majority of them, no amount of physical activity could cure their illness. After two semesters of being in the program, I wanted to do a research project that would help show the complexity of this issue. As noted in the introduction, that is how this project was born.

Being so invested in the preconceived outcome, however, was a problem.¹⁵ I did not want to unintentionally bias the research any more than it would be, as no research is free from bias. As such, I had to be extra careful when constructing the interview questions as to not form leading questions, and to allow participants to speak to both the beneficial outcomes of physical activity, as well as the shortcomings or challenges. After all, if I were to not allow for women's discussion of the benefits of a particular therapy, I would be doing what I critique some feminist social scientists of doing with regard to psychopharmaceuticals—that is, inadvertently undermining the benefits of the therapy for political or ideological reasons. As an added measure, I conducted a pilot interview with a friend who self identifies as having OCD (as well as a sleep disorder).

Some of my other reflexive strategies are discussed in more detail below. For instance, in line with social work researchers' reflexive practices analyzed by Probst and Berenson (2013), taking participant notes following each interview, and discussing the interviews—and my thoughts—with my advisor helped to sort out my thoughts about the data and attempt to reduce the extent to which my biases may shape the questions I am asking and the way I am thinking about the information. Following up with the participants through a second interview also allowed for verification of data, or member checking, which is a measure of validity (Lather,

1986b; Morse, 2015), as it helps to ensure the participants' story and meaning are accurately understood (although one could critique the idea that there is any 'accurate' interpretation).

Increasingly, there are calls within physical cultural studies for researchers to engage in reflexive practices by putting oneself in the research (Giardina & Newman, 2011). This entails not only accounting for one's own biases, but the way the researcher's positionality (e.g., perceived race, class, sexuality, gender identity, ability, etc.) may affect what content participants share, or the way in which it is framed. While I do understand that the researcher's insider/outsider status can affect the type of data that is collected, I have reservations with the imperative for researchers to always, explicitly place themselves in the research in this way. For one, Thorne and Varcoe (1998) noted that such discussion of oneself can result in a superficial listing of identities, without any evidence that those identities did in fact shape the research. Of course, the interviewer's presence affects data collection, not only in terms of identity, but interviewing skills, personality, and other characteristics. However, it is usually not known how participants are (often times subconsciously) altering the information they provide based on the interviewer, unless they explicitly make references to shared experiences (see, for example, Harris [2015] for a discussion of insider/outsider status with regard to injection drug use).

My second point of contention is that the imperative to place oneself in the research process is asking researchers to out themselves. While it may be harmless for somebody to think through how their (cis)gender identity may have affected the research (e.g., a woman interviewing men about a sensitive topic), researchers with

more stigmatized identities are placed in a precarious position. If they are to out themselves as having a stigmatized identity, that could compromise their job prospects or reputation. And if other (qualitative) researchers continue to define 'rigorous', 'quality' research as that which is attendant to issues of (embodied) reflexivity (Giardina & Newman, 2011), it will inadvertently position researchers with stigmatized identities as less adequate scholars. It was with these sensibilities and modes of analysis that I engaged in the research project. I now turn to the results, beginning with the identification and analysis of dominant discourses related to "exercise is medicine" for mental illness.

Chapter 4: Exercise is Medicine: Dominant Discourse

Analysis

The purpose of this chapter is to better understand what narratives related to mental health and physical activity are being advanced, what the potential implications of such messages may be (with specific regard to the effects on people with mental illness), and why it is that such messages are being conveyed. I begin by analyzing the dominant narratives related to physical activity and mental illness that are currently circulating in the Western context (i.e., popular press articles, social media content, government documents, public health initiatives, etc.). Overall, through my analysis, I found that there are a variety of messages being promoted related to exercise, physical activity, or less commonly, sport, as a type of therapy for people with mental illness. The content of the messages lays on a spectrum from strong, sensationalized proclamations suggesting that exercise is a ‘cure’ for mental health issues, to critiques of the efficacy of physical activity for preventing/treating mental illness. The majority of the content, arguably, falls somewhere in the middle: The benefits of physical activity are acknowledged, yet it is not positioned as a cure, or even the most effective form of therapy. For many of the surveyed articles, multiple, and at times contradictory, messages are being put forth. For example, the headline of a news story may suggest one thing (e.g., exercise is a cure for depression), while the article itself provides a more balanced account of the potential benefits of exercise (see, for instance, Jabr, 2017).

In addition to outlining what is being said, I also discuss some of the potential implications of the dominant discourses related to mental illness and physical activity

that are circulating in the popular press. The more sensationalized accounts of physical activity as a therapy, for instance, can be seen to promote misconceptions about mental illness (i.e., that it can be “cured” or “beat” through exercise), and, at times, position it as superior to other forms of treatment, such as psychopharmaceuticals. At the same time, tangible solutions to making physical activity more accessible to this population is largely absent. The last part of the chapter focuses on why it is that such narratives are being promoted. In other words, what economic, political, cultural, technological, or even biological processes are coming together to form the context in which exercise is medicine for mental health seems to resonate with a portion of the population in Western nations.

In what follows, I elaborate on the main themes or narratives related to physical activity and mental illness that I identified in my examination of the popular literature. I begin with the themes that most strongly endorse exercise as a form of therapy, before moving onto the more nuanced, or even critical, messages. After describing the content and scope of each particular narrative, I discuss the implications—positive or negative—of such messaging. I conclude the chapter by discussing the reasons why these dominant narratives exist; or, in other words, what political, cultural, social, economic, or technological factors have come together to form the current context in which these messages circulate and may resonate with audiences.

Dominant Narratives: What are They and Why Does it Matter?

Exercise is a cure. The most extreme messaging suggests that physical activity is a “cure” for particular mental illnesses. These proclamations are found in

reports from government agencies, non-profits (e.g., Exercise is Medicine initiatives), and in popular press articles. For instance, in a 2009 annual report by the Chief Medical Officer (CMO) in the UK, physical activity was discussed as a major public health priority. The section on physical activity was entitled: “Moving to nature’s cure,” thus positioning exercise as something that is both “natural” and curative. In the discussion, it was noted that “The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a ‘wonder drug’ or ‘miracle cure’” (Department of Health, 2009, p.21). Similarly, another section of the document elaborated: “The human body evolved to move; physical activity should be as much a part of everyday life as breathing or eating. Why, then, are so many people continuing to ignore nature’s cure?” (Department of Health, 2009, p. 22). With regard to mental illness, the authors suggest that exercise may help to prevent depression, and can even be as effective as medication in treating it. However, there is no mention of specific barriers faced by people with mental illness in being more physically active, or ways in which such barriers could be mitigated (Department of Health, 2009).

In line with the language in the CMO report, a 2015 report by the Academy of Medical Royal Colleges (AMRC) was entitled *Exercise: The miracle cure and the role of the doctor in promoting it*. The authors of the document argued that exercise is an often-overlooked way to improve a variety of chronic conditions, including, but not limited to, depression. They explained that “...the message is simple. Exercise is a miracle cure too often overlooked by doctors and the people they care for” (AMRC, 2015, p. 5).¹⁶ Content produced by the Exercise is Medicine initiative in the US has

similarly uncritical messaging about exercise as a cure. In their November 2014 newsletter (which can be found on the EIM website), there was a section titled *Finding a Cure for the 21st Century Plague*, with the “plague” being (unspecified) non-communicable diseases, and the “cure”, more active citizens through the creation of walkable cities (EIM, 2014). While mental health was not specified in the article, depression and anxiety are listed in EIM materials, including content on the website, as conditions that can be helped with physical activity. Similarly, a one-page informational resource for healthcare providers also included on the EIM website, *The Miracle Drug: Exercise is Medicine* (with a subheading entitled *The Exercise is Medicine Solution*), provides practitioners with an assessment tool to help them determine how much physical activity clients currently engage in versus recommended levels (EIM, n.d.). While the information provided is simple and straightforward, the titles and subheadings can be seen to oversell exercise as a type of therapy. I return to the EIM initiative for a more in-depth examination in the following chapter.

The messaging that equates exercise as a cure for chronic health issues infiltrates popular press articles, as well. This is no coincidence as knowledge that is disseminated in well-respected reports (e.g., AMRC, 2015) and academic articles is disseminated in news stories, magazine articles, and editorials. As an example, in a 2016 editorial in the *New York Times*, Aaron Carroll, MD, positioned exercise as the “closest thing to a wonder drug”, citing, among other literature, the AMRC’s report (Carroll, 2016, title). Similarly, in a 1985 article in *Prevention* magazine, the author began with an anecdote about a depressed woman who was contemplating suicide and

then, “[t]wo weeks later, she was cured. Not by antidepressant drugs. Not by group therapy. By running” (Gottlieb, 1985, p. 61). Other popular press articles sell the idea that exercise can be a cure through their sensational titles, such as “Research shows bouldering [rock climbing] is a cure for anxiety and depression” (Steele, 2017, title) and “The exercise cure: Why it may be the best fix for depression”, which was a featured headline on the cover of the January/February 2017 issue of the *Scientific American Mind* (Jabr, 2017, title).

Other articles, while not using the term “cure”, send similar messages by suggesting that mental health issues—mainly, depression or anxiety—can be “beat” or overcome with the use of exercise (alone, or in conjunction with other therapies). For instance, the title of a 2013 article in *Prevention* on strategies to help with generalized anxiety disorder (with physical activity being one of them) was entitled: “Problem→solved! Anxiety” (Winters, 2013). Similarly, an article in *Better Nutrition* titled “Blues busters: 17 ways to fight depression naturally” noted that “When coupled with lifestyle changes [such as exercise] that promote neurotransmitter production, nutrient therapy may be all you need to beat the blues” (“Blues busters”, 2011, p. 35). Other examples of this rhetoric included headlines such as “four drug free ways to beat depression” (Pesman, 2009) and “3 ways to beat depression through exercise in 2014” (Cowan, 2014).¹⁷

Suggesting that physical activity can help one “cure” or fully “beat” their mental illness can be seen to promote misinformation about mental illness. It is well-established in the literature that there is no cure for mental illness—particularly severe mental illness such as major depression, schizophrenia, bipolar disorder, and

severe forms of various anxiety disorders (e.g., OCD, PTSD, generalized anxiety disorder). People with severe mental illness often undergo a highly individualized recovery process consisting of ebbs and flows of different degrees of distress throughout their lifetime (e.g., Davidson & Roe, 2007). Positioning physical activity as curative not only disseminates misinformation, but it can make people for whom exercise is not overwhelmingly effective feel even more stigmatized. Moreover, seemingly innocuous rhetoric that describes mental health issues such as depression as something that can be “beat” sends similarly inaccurate and potentially harmful messages. While it is fortunate that the majority of the articles that mobilized this discourse included competing narratives, as can be seen by the previously mentioned *Scientific American Mind* article (Jabr, 2017), in many cases, one would have to read the entire article in order to be exposed to the different viewpoints. It is often the title that has the sensationalized message, though, and arguably that may be the message that sticks with the reader the most (especially if they do not get past the title).¹⁸

Exercise is natural and, therefore, may be better than antidepressants. In many of the surveyed articles and documents, exercise was juxtaposed with antidepressants, with the takeaway being that exercise can be as effective, or even more effective, as antidepressants in helping with depression. For instance, headlines of popular press articles read: “D.C. doctor’s Rx: A stroll in the park instead of a trip to the pharmacy” (Sellers, 2015); “Why exercise is better than pills for depression” (Lee, 2013); and “Exercise: It beats Prozac!” (Cameron, 2005). Another glaring example of this discourse can be found in the description and promotion of the book, *Yoga and Depression*, by Amy Weintraub (2004). Weintraub is a yoga practitioner

who had suffered from depression and found yoga to be instrumental in her recovery. Before one even opens to the first page, the reader is met with the heading on the back cover encouraging him or her to “*Take the natural path to wellness.*” The description that follows reads:

More than 25 million Americans are treated with antidepressants each year, at the cost in excess of \$50 billion. But the side effects of popular prescription drugs may seem nearly as depressing as the symptoms they’re meant to treat. Veteran yoga instructor Amy Weintraub offers a better solution—one that taps into the scientifically proven link between yoga and emotional well-being as the beauty of ancient approaches to inner peace. (Weintraub, 2004, back cover)

Below the overview, an endorsement of the book by Laura Slater, author of *Prozac Diary* and *Lying: A Metaphorical Memoir*, similarly plays on anti-pharmaceutical discourse. She stated: “In a world obsessed with psychopharmacology, this book is a refreshing reminder that, in some cases, the tools that we have to cure depression reside not in a pill but our own bodies, if we are willing to try” (Weintraub, 2004, back cover). The aforementioned quotes play on the idea that psychopharmacology is overused and always produces adverse side effects, while also promoting yoga as a “solution” or “cure”, respectively. Luckily, while the back cover of the book contains extreme messages related to the potential of yoga to cure one of depression alongside the shortcomings of psychopharmaceuticals, Weintraub does not make such strong declarations in the book itself.

In addition to its presence in the mainstream media, the positioning of exercise as a (superior) treatment option can also be seen in other forms of media content, for instance, fitspirational-style memes or images shared on social media sites such as Instagram, Tumblr, Facebook, or Pinterest, or associated with text related to the mental health benefits of exercise posted on personal websites or blogs. As an example, there is a Tumblr blog, which began in 2011, entitled “Reasons to be fit.” Many, if not all, of the memes posted have accompanying “fitspiration” or “fitspo” hashtags, and include images of predominately fit, toned people (mostly women) with accompanying motivational text ranging from silly (e.g., references to outrunning zombies) to harmful (below example). Some of the memes specifically refer to psychopharmaceuticals. For instance, one of the early posts from 2011 features a woman engaged in exercise with the text: “because endorphins are the best antidepressants” (“Reasons to be fit”, 2011a) (Figure 1).



Figure 1— “Fitspiration” found on the Tumblr blog, *Reasons to be Fit* (2011a)

The positioning of exercise against pharmaceuticals is, at times, the result of research that attempts to see if physical activity may be as effective as current best practices—which, in the case of moderate to severe depression, is a combination of antidepressants and talk therapy (National Institute of Mental Health, 2016). If researchers find that participants in a particular exercise program had a reduction in depressive symptoms to the same extent, or more so, compared to the control group receiving medication or therapy, such research gets taken up by the media. This results in the previously mentioned headlines, or references to the (supposed) effectiveness of physical activity. As will be discussed more below, describing exercise as more effective than medication can also be perpetuated by anecdotal evidence: Accounts of people with mental health issues who have successfully overcome their illness through exercise (and other non-medical means), or who know of others who have accomplished this.

In line with the exercise/pharmaceutical binary, and as touched on in the *Yoga and Depression* (Weintraub, 2004) example, exercise is, at times, positioned as a “natural” remedy for mental health issues. Similar to the previously mentioned article, “17 ways to fight depression naturally,” in a Harvard Health Letter, exercise is described as “an all-natural treatment for depression...Exercise is as effective as drugs in some cases” (Exercise is an all-natural treatment”, 2013, p. 3). In addition, an article in *Prevention* magazine encouraged readers to “Beat depression naturally” through the use of physical activity (Stanten, 2000, title). This is based on the assumption that pharmaceuticals are unnatural due to their synthetic chemical components. Physical activity, on the other hand, is thought to be more organic as it is

frequently said to require little more than one's own energy and a pair of shoes. As stated on the EIM website's "Your rx for health" section in a two-page handout with tips on exercising with anxiety and depression, readers are advised: "All you really need, though, is a good pair of shoes to get started walking" ("EIM your rx for health series", 2017, p.1). In a similar vein, exercise is, at times, described as an antidepressant that is free from side effects. As therapist Michael Kimmel noted in an article in the *Gay and Lesbian Times*, "I am a psychotherapist, not a personal trainer, and I find that regular, intense, cardio-boosting, endorphin-generating exercise is one of the best antidepressants you can buy (and there's no side effects either, except for sweaty workout clothes)" (Kimmel, 2010, p. 21).

The naturalness of exercise as a form of therapy is also reiterated through references to the human body's supposed innate propensity to be active. At times, this took the form of contrasting modern day humans with their hunter-gatherer ancestors who were presumed to be more physically active. As an example, in a recent (2017) article in the *Guardian* on the mental health benefits of physical activity, public health researcher, Dr. Nick Cavill, explained: "It [movement] is what we were designed to do...everybody probably knows the basic point, but often we overlook it in our modern busy lives. We are hunter-gatherers. We were designed to be physically active all day long" (Boseley, 2017, para. 7-8). Such references can be seen to naturalize the human body, obscuring the way evolution, culture, and other factors shapes modern humans (not to mention historical inaccuracies).

At times, the preference for the "natural" is amplified through calls to not only get people moving in order to prevent or treat chronic conditions, but to encourage

people to recreate in natural environments. National programs such as the National Park Services' Healthy Parks Healthy People (HPHP) initiative is a prime example (NPS, 2011). Piloted in 2011, the program works to promote the health-enhancing aspects of national parks. While mental illness is not specifically mentioned, there is attention to mental health in HPHP's documents. Related initiatives include park prescription programs in which healthcare providers write patients prescriptions to parks (e.g., the aforementioned *Washington Post* article entitled "D.C. doctor's Rx: A stroll in the park instead of a trip to the pharmacy"; Sellers, 2015). An article in the *New York Times*, "Head out for a daily dose of green" (Brody, 2010), similarly reported on national efforts to motivate people to recreate outdoors in the name of health, though it did not juxtapose pharmaceuticals with outdoor recreation in the way the *Washington Post* article did. In a particularly egregious example, a meme created by TruthTheory.com, which was posted on its Facebook page in 2016, shows a natural landscape in the top half of the image with the text "This is an antidepressant." The bottom of the picture is an image of a Prozac pill, with accompanying text "This is shit" (TruthTheory, 2016) (Figure 2).



Figure 2—Meme produced by TruthTheory.com, posted on their Facebook page, April 30, 2016.

Importantly, this meme sparked outrage, and there was an outpouring of responses from people—many of whom have experienced mental health issues—with the image below being an example (Rose, 2016) (Figure 3).



Figure 3—A meme created in response to the original image (Figure 2) pushing back against the idea that there is only one type of effective or reputable treatment for depression (Rose, 2016).

Messaging that positions exercise as better than antidepressants can similarly be seen as overselling exercise and contributing to the stigmatization of people who take antidepressants. While there is a growing body of research that suggests that

structured exercise can have antidepressant effects as good as, or better than, antidepressants, some researchers suggest that this is not entirely true: Many of the studies that make such claims suffer from methodological shortcomings such as not screening for diagnosis of depression (but instead, general feelings of depression), not including people without co-morbidities, and not having a double-blinded study method (Chalder et al., 2012; Cooney et al., 2013). In addition, researchers have found that the benefits of exercise are often not present at follow up (past four months; Chalder et al., 2012). Beedie and colleagues (2016) also noted that while exercise may be efficacious for improving mental and physical health, the *effectiveness* of exercise has yet to be determined. In other words, it is still unknown how to help people engage in consistent physical activity in “real world” settings.

Juxtaposing exercise with antidepressants is particularly concerning as such medications continue to be stigmatized. As will be discussed further in the next section, for some people, psychopharmaceuticals are lifesaving (Pies, 2010). This is not to suggest that physical activity cannot be helpful—or even replace medication—for some, but for others with more severe forms of depression or anxiety, they may have to rely on medication for their entire lives. Flippant headlines that suggest a “stroll in the park” can replace “a trip to the pharmacy” trivializes mental illness (and other serious chronic health conditions) and can make people feel as though they should be able to manage their condition without the aid of pharmaceuticals.

Exercise can be helpful in managing mental illness. As opposed to the more extreme proclamations that exercise can be a miracle drug, or cure, for mental health issues, a larger percentage of articles were more nuanced in their messaging. Exercise

was described as something that could indeed be helpful for people with mental illness; however, it was not oversold, and the shortcomings of exercise as a treatment were discussed. In some articles, people living with mental health issues, such as PTSD, OCD, and depression, were interviewed, allowing for their embodied experiences with physical activity and mental health to be heard. In the Canadian newspaper, *The Daily Gleaner*, a college-level rugby player with depression, excoriation disorder (part of the OCD spectrum), and generalized anxiety noted that she believes being physically active is “one of the most important things somebody battling with a mental illness can do” (Howland, 2015, para.15, author’s words). She first realized how important it is when she had a period of inactivity following an injury: “Unfortunately I did end up getting injured and had to stop playing and I think that did play a part in my initial downward spiral that led to my first hospitalization. It really made me recognize what an important role physical activity had in my wellness overall” (Howland, 2015, para. 9). Expressing similar sentiments, Lena Dunham (writer and actor) recently explained via an Instagram post (caption) that exercise “...has helped with my anxiety in ways I never dreamed possible” (Primeau, 2015, para. 2). Some individuals noted that experiencing the benefits of physical activity encouraged them to help others with mental health issues achieve similar results. In a 2015 issue of *Yoga Journal*, a yoga instructor detailed how developing cervical cancer led to her depression. Yoga was a way in which she was able to recover, and she now enjoys working with others who are struggling with similar issues (Lucier, 2015). Others who experience mental illness have taken on an advocacy role, calling for more research and programming dedicated to non-traditional therapies, such as

physical activity (Phillips & Wang, 2014). These examples show that physical activity can play a prominent role in individuals' recovery from various mental health issues.

Other articles reported on studies that showed that particular types of physical activity could help reduce anxiety, depression, or OCD (there were fewer articles on schizophrenia and bipolar disorder). In a 2002 article in the *Sydney Morning Herald*, for instance, the author noted that "Overseas studies show that yoga has a positive effect for people suffering from asthma, osteoarthritis, obsessive-compulsive disorder and cardiovascular diseases" (Johnson, 2002, para. 9). Though it may be subtle, describing yoga as having a "positive effect" provides a more tempered account of the potential benefits of a particular physical activity; it does not promise one will feel significantly better, or cured.

Also of significance, many of these articles listed physical activity or exercise as but one of many different ways to help cope with symptoms of mental illness. For example, in a 2016 article in a South African newspaper, the *Daily Dispatch*, about the increasing prevalence of anxiety disorders, the author, drawing on expertise from mental health professionals, noted that cognitive behavioral therapy (CBT) can be beneficial in treating OCD, though one can also try other things such as mindfulness, meditation, breathing exercises, and managing one's diet and exercise routine ("Don't let anxiety control you", 2016). What is important to note is that medication or behavioral therapy was not positioned as inferior to physical activity in such articles. Instead, there was more nuance in terms of the extent to which different treatment strategies may be effective in helping people with mental health issues. As an

example, a military veteran interviewed in a *New York Times* article explained how he struggled with treatment for PTSD: He discontinued therapy and stopped taking his medications. Over time, he found that a combination of treatments including talk therapy, medication, meditation, yoga, and exposure therapy in the form of SCUBA diving was an effective approach to managing his symptoms (Philipps, 2016). A psychiatrist who works with cancer patients interviewed in a *USA Today* article similarly endorsed the use of physical activity alongside other treatments by explaining that “I don’t think exercise will ever be the only treatment, but it may be a major part of preventing recurrences” (Painter, 2010, para. 20). Such messages convey to readers that physical activity can be helpful in recovering from mental illness, yet they do not oversell its effectiveness or gloss over the fact that for many people with mental illness, exercise in and of itself is not enough to produce significant, long-term mental health benefits.

Challenges of being physically active. Alongside discourse that promotes physical activity as something that can be helpful for people with mental health issues, there is acknowledgment of how difficult it can be for people with mental illness to start, and sustain, regular physical activity routines. For instance, in a memoir detailing her struggles with OCD and depression, journalist Bryony Gordon explained:

My therapist tells me that I should be trying to exercise as much as possible. I respond by telling her that is a really stupid thing to suggest to me. Telling a person with depression to get up and go for a run is like telling someone with

alcoholism to skip the vodka and have some water instead. Because when you are in the grips of depression, you cannot move. (Gordon, 2016, para. 23)

Psychiatrist Dr. Norman Sussman, who was quoted in a 2005 *New York Times* article on physical activity as a treatment for mental illness, echoed Ms. Gordon's sentiments, asking: "If someone is so apathetic that they can't even change their clothes or get out of bed, which happens in severe depression, how can you tell them to go down to the health club?" (Ellin, 2005, para. 19).

Acknowledging that motivating people with mental health issues to exercise can be challenging, there was some attention to the need to encourage enjoyable or pleasurable physical activities as opposed to rigid exercise plans. In the aforementioned article on exercise for depression in the *Scientific American Mind*, Michael Otto, a psychologist who was interviewed for the article, remarked that "Enjoyment is fundamentally linked to how much people stick with exercise [...] I want them to do what is most fun and entertaining, whatever that might be" (Jabr, 2017, p.31). As Dr. Joseph Loizzo noted in a 1997 *New York Times* article, too often people have "self-punishing" attitudes towards exercise that makes it less enjoyable and more difficult to sustain (Grady, 1997, para. 8). Along those lines, in an interesting alternative narrative reported in 2005 *Daily Mail* article, researchers found that watching a sitcom on TV resulted in greater acute mood benefits compared to exercising for a similar length of time. The researchers noted that while physical activity may be beneficial, it is often difficult to sustain and, therefore, they wanted to see if other pleasurable activities could be equally beneficial for mental health (Wheldon, 2005).

In a few articles (e.g., Ellin, 2005; Saint Louis, 2013), there was specific reference to programming designed to help people with mental illness become more active. In an article that focused on how people with mental illness are more prone to being overweight (due in large part to medication), attention was given to the In SHAPE intervention that helps people with mental illness become more physically active and eat healthier through the use of health mentors and access to community health facilities (this intervention is described in Chapter 5; Ellin, 2005; Saint Louis, 2013). Other articles described sports programs in the UK that create an inclusive space for people with mental illness, such as the Good Mood Football League (“Good mood teams”, 2011), and the Positive Mental Attitude Football League (Herdman, 2013).

Importantly, only two articles in this sample made specific reference to the ways in which access to physical activity is an issue of (in)equality and social justice. One *Washington Post* article, for instance, referenced the positive effects yoga can have on (mental) health and attempts on the part of advocates to help make it more accessible to marginalized populations, such as incarcerated people, people with HIV/AIDS, and youth, among others (Brown, 2009). There was not specific reference, however, to people with mental illness as a marginalized group. In the same vein, the author of an article in *Parks and Recreation* drew attention to physical activity disparities affecting “under-represented groups” such as people with multiple sclerosis, HIV/AIDS, and caregivers (Berg, Van Puymbroeck, & Parr, 2005, title). While there was reference to how such individuals may develop symptoms such as

depression, there was not a specific focus on mental illness or the physical activity disparities faced by people with mental health issues.

The lack of attention to social determinants of (mental) health, or barriers to physical activity beyond individual-level factors (e.g., lack of motivation or difficulty being active due to symptoms of illness) is striking as people with mental health issues face myriad structural barriers that contribute to their higher levels of inactivity. The stigma related to mental illness, for instance, can be seen to contribute to difficulties securing employment, resulting in lower income levels. It can also make people less inclined to be in public spaces—participating in physical activity or other social activities. In addition, disparities in funding for mental health services compared to physical health services can make it harder to visit a healthcare provider or to gain access to health-enhancing programming. As previously mentioned in the literature review, helping people with mental illness participate in physical activity requires a “complex intervention” (Faulker & Taylor, 2009, title) consisting of effecting change at the micro, meso, and macro levels to address the myriad barriers to participation. By ignoring the unique impediments to exercise faced by this population, the focus remains on creating individual-level change. I will explore this aspect in more detail in the following chapter.

The limits of physical activity as a treatment. Lastly, there were messages present in some of the articles that pushed back against the idea that physical activity or exercise is always an effective treatment, or even health enhancing. One form this took was references to research that found no added benefit of physical activity on the symptoms of a particular mental illness (mainly, depression). One such article was

featured in a 1997 edition of the *New York Times* and was aptly titled “Exercise may not curb depression” (Grady, 1997). Eleven years later, there was a similar article featured in the *New York Times* in which the author reported on a recent meta-analysis that found no causal link between exercise and depressive symptoms (though the researcher who conducted the analysis did not dismiss the mental health benefits of exercise; Bakalar, 2008).

Interestingly, in the beginning of the aforementioned *Yoga and Depression* book, the author described her experience while in the grips of her depression as follows: “A stultifying numbness had settled in. Sometimes I rose in the morning with what felt like a layer of cotton batting between my brain and my cranium. Neither coffee nor exercise penetrated the thickening” (Weintraub, 2004, p. 2). At that time, exercise was not enough to break out of her all-consuming depression. However, she goes on to explain how a regular yoga practice—a particular form of physical activity that is thought to tap into deeply embodied emotions—was effective in helping her recover. This suggests that exercise, in general, may not necessarily be medicinal for everybody, and different forms of physical activity, particularly those that foster mind-body integration (as discussed in the literature review), may be needed.

A few articles focused on the way physical activity or exercise can contribute to *poor* mental health in the form of depression, exercise addiction, body dysmorphia, or eating disorders. As an example, in an article in *Prevention*, a woman wrote about her experience of becoming a fitness blogger and personal trainer in an attempt to overcome her postpartum depression and “unhealthy” lifestyle. The pressure to be perfect and maintain a particular look (i.e., thin and toned), however, ended up

resulting in anxiety and depression, forcing her to take time off to reevaluate her priorities and goals (Liebennan, 2014). In this way, physical activity—or the way in which physical activity is associated with particular aesthetic ideals—can contribute to poor mental health.

Similarly, other articles highlighted the way in which people can develop exercise addictions or body dysmorphic disorder (BDD). The majority of these took the form of providing information about BDD or exercise addiction (e.g., signs that one may have a problem with exercise; “Do you have body dysmorphic disorder?”, 2013). Some, however, simultaneously downplayed the significance of such issues. For example, in an article about people who over train at the gym and the health implications—at times, deadly—of doing so, a personal trainer noted that the risk of not exercising is far greater than the risk of developing an addiction (Lynch, 2013). In addition, in an article in the Florida Times-Union, a NASCAR driver described himself as having a bit of OCD that drove him to be really into fitness. He described this as a “healthy addiction” (Frenette, 2013, para. 8). “Healthy addiction” rhetoric was also found in digital media content, such as fitspiration memes. One such image was also part of the previously mentioned “Reasons to be Fit” Tumblr blog. It depicted a thin, toned woman lifting weights with the accompanying text: “Cause there’s nothing wrong with being an exercise-aholic” (Reasons to be fit, 2011b).¹⁹ While it is important that there is resistance to the idea that exercise is always health-enhancing, at the same time, messages that valorize over-exercising, or go as far as describing it as a “healthy addiction” contribute to a culture that normalizes unhealthy relationships with exercise. The lines between being active because it is pleasurable

or contributes to holistic well-being and compulsively exercising to the point that it is damaging to one's physical or mental health are continuously being blurred (as described in the literature review).

Through this analysis, it is clear that the promotion of physical activity as a type of therapy is prominent not just in the academic literature, as discussed in the literature review, but also in the mainstream and social media, as well as public health initiatives. The main messages that are being sent range from a potentially dangerous overselling of exercise as a “cure,” to more critical narratives that highlight the ways in which physical activity, if abused, may contribute to poor mental health. The majority of the data sources that were reviewed could be seen to fall in the middle of the two extremes: They promoted physical activity as a type of treatment, but did not exaggerate its effectiveness, or perpetuate harmful comparisons to other types of treatment. This was especially true for content that focused on mental illnesses such as schizophrenia, bipolar disorder, obsessive-compulsive disorder, or PTSD. This is most likely the case as these are viewed as more serious illnesses, and suggestions that somebody with schizophrenia need only to exercise to be “cured” would be readily dismissed. Depression, on the other hand, seems to be too easily invoked as a stand-in for sadness, or, more mild cases may be featured. I revisit these narratives and how to improve upon them in the conclusion chapter of the dissertation.

Why is Exercise Promoted as a Mental Health Treatment?

In the above sections, I analyzed what dominant narratives are circulating related to physical activity as a treatment for mental illness, and what the implications of such narratives are. In the remainder of this chapter, I discuss *why* it is that such

messages are being promoted. In line with (physical) cultural studies' theory and method of articulation (e.g., Slack, 1996), it is not enough to stop at the analysis of the discourses: An examination of what factors—political, economic, sociocultural, biological, and technological—are coming together in this moment in America (and other Western nations) to form the context in which such narratives are produced (and in a dialectic fashion, actively shape the way physical activity and mental health is understood) is needed. Without this level of analysis, effecting change or intervention is more difficult or superficial. The discursive or ideological connections between certain factors or ideas must first be dis-articulated (i.e., identified and critiqued) before they can be re-articulated in ways that contribute to a more socially just society (Silk & Andrews, 2011). To give an example, if I want to create better messages related to mental health benefits of physical activity, I must first identify what factors contribute to—or the reasons behind—exercise being positioned as superior to antidepressants. Once those are identified, I can then attempt to create different linkages between ideas (re-articulation) that would result in a different understanding of the mental health benefits of physical activity.

In what follows, I examine five factors that I believe help to form the context in which exercise is promoted as a mental health therapy: Healthism and the Protestant work ethic; the societal privileging of the natural; the pharmaceutical industry; kinesiology departments and its ties to the fitness industry; and the role of the mental health consumer. I believe these speak to why exercise is being promoted as a therapy in general, but they especially provide insight into the narratives that position exercise as a cure, or better than pharmaceuticals. I focus more attention on

these extreme or sensational messages as I believe they have the most potential to do harm (as will be discussed in Chapter 6). In that way, when considering how to best re-articulate particular linkages, it is these more egregious narratives that are in need of closer examination and remedying.

Healthism and the Protestant work ethic. One of the main reasons that physical activity is increasingly being tied to mental health, as demonstrated by the aforementioned narratives, can be seen as the result of the pervasiveness of healthist ideologies and politics. Crawford (1980, 2006) described the pressure for people to embody health, and the morality tied to such performances of health, as “healthism.” Healthism is predicated on the belief that good health is not only desirable, but achievable if one work hard enough (i.e., exercise willpower, follow expert advice). This ideology can be seen to have become more pervasive and insidious in the United States beginning with the Reagan administration in the 1970s and early 80s. In an effort to reduce government spending, the Reagan administration made substantial cuts to social welfare programming. The responsibility to meet one’s needs were transferred from the state to the individual (Lupton, 1995). This “imperative of health” (Lupton, 1995, title) has been critiqued for placing an inordinate amount of responsibility on the individual to achieve a certain level of health, and focusing primarily on individual-level behavioral change strategies that encourage one to eat healthily, exercise, and avoid risky behaviors. People who fail to live up to these ideals are stigmatized and cast as morally inferior and drains on the healthcare system.

The use of physical activity through government and other public health initiatives to improve the (mental) health of the nation can be seen to align with healthist political agendas (e.g., Malcolm, 2016). As noted by Malcolm (2016), physical inactivity is considered to be one of four modifiable behaviors—along with tobacco, drugs and alcohol, and diet—that can lead to improved population health. By encouraging people to become more physically active as a way to prevent or reduce the burden of mental and physical health conditions, the onus remains on individuals, as opposed to the government. As mentioned in the literature review, most physical activity-based public health initiatives do not invest in the structural changes needed to make physical activity more accessible to those with chronic conditions, or people marginalized due to other forms of oppression (Bercovitz, 2000; Fullagar, 2002, 2003). As argued by Smith and colleagues (2016), such efforts to encourage the use of physical activity to improve (mental) health can be seen as more of lip service versus a concerted effort to help people become healthier.

The use of physical activity as a therapy would not be so well-received, however, if such messages did not resonate with the general population. It is not just government officials looking to cut spending who are on board with the use of physical activity. As evidenced by some of the previously mentioned messages, the lay public plays an integral part in perpetuating the discourses that link physical activity with improved health. One reason for this is the morality associated with the hard work and restraint, or Protestant work ethic, that regularly participating in exercise is thought to require. In other words, it is not enough that one achieves a certain level of health, but *how* one does it matters. As an example, Mattingly,

Stambush, and Hill (2009) found that research participants rated women who lost weight via surgery, as opposed to diet and exercise, as less responsible for their weight loss, less attractive, and less healthy.

The devaluing of therapies that are (incorrectly) stigmatized as being “quick fixes” can perhaps most clearly be seen in the debates over psychopharmaceuticals, such as antidepressants. Since the popularity of Prozac and other SSRIs, a veritable anti-antidepressant industry has developed, exemplified by books such as *Toxic psychiatry: Why therapy, empathy and love must replace the drugs, electroshock, and biochemical theories of the "new psychiatry"* (Breggin, 1991) and *The emperor's new drugs: Exploding the antidepressant myth* (Kirsch, 2010). Such critiques are often based on the effectiveness of such medications; however, at times, increased pharmaceutical use is framed as a societal flaw: an apparent distaste for hard work and affective discomfort, and an embrace of quick fixes (Olsen, 2006). Unlike remedies such as exercise, diet, or other lifestyle changes, medications are considered to be unnecessary except when all other solutions have been exhausted, especially drugs considered to be cosmetic in nature (e.g., Kramer, 1993). Kramer (2006) noted that even psychotherapy, which, in conjunction with SSRIs is currently considered to be the most effective treatment for mental illnesses such as major depressive disorder, is dismissed by some who view it as a way of relying on others, as opposed to the self, for change or improvement.

The discourse surrounding antidepressant use also invokes the Protestant work ethic through its privileging of elements of an ascetic lifestyle, such as the valorization of affective, and physical, suffering. Olsen (2006) contended that the use

of antidepressants to treat depression is feared by many as enduring hardship is considered to be a necessary ingredient in the development of character. This is perhaps best exemplified by the popular quip, “what doesn’t kill you only makes you stronger.” Olsen, however, debunked this logic by drawing an analogy to child abuse. If a child was residing in an abusive home, nobody would suggest he or she remain there in the name of character development. Yet when it comes to mental illness, academics, activists, and the lay public alike, at least inadvertently through their critiques of medication, endorse, if not privilege, intense, debilitating mental anguish. Psychiatrist Peter Kramer (2006) gave an example of such sentiments by describing people’s reaction when asked if they would be okay with eliminating depression. Though one would imagine nobody would bat an eye at the suggestion of eradicating diseases such as cancer, HIV, or diabetes, when it came to depression, his audience hesitated. The fear was that depression, existing along a continuum, was an essential part of the human psyche; something needed to produce great works of art, elicit deep feelings, and maintain connection with others. Depression, in other words, unlike most other illnesses, is romanticized and (fallaciously), to an extent, considered an important part of society.

Men, in particular, may be susceptible to such beliefs, due to harmful norms of masculinity that value such independence or rugged individualism (Courtenay, 2000; O’Brien, Hunt, & Hart, 2005). Such socialization has been found to lead to men’s underutilization of healthcare services (Courtenay, 2000; O’Brien et al., 2005). Mental health services, in particular, are stigmatized along gender lines: particular mental illnesses, such as anxiety and depression, are viewed as feminine disorders or

viewed as weaknesses or moral failure (Branney & White, 2008; Johnson et al., 2012; Lewis, Willis, Kokanovic, & Pirotta, 2015). The previously mentioned use of sport, such a football (soccer) leagues or programs in the UK, as a way to get men with mental illness to receive treatment is an attempt to break down such gendered barriers to healthcare (e.g., Magee et al., 2015).

Privileging of the “natural.” Another reason for the, at times, enthusiastic promotion of physical activity as a type of therapy can be seen to be linked to its supposed naturalness—as described above, this was a prominent narrative in physical activity for (mental) health literature. In this current health-conscious moment, that which is considered natural is largely privileged over synthetic entities including food, medicines, and other health or beauty products. Whole, organic foods are juxtaposed with highly processed, artificial foods (Guthman, 2003; Knight, 2012; Lupton, 1996); breast milk with formula (Wall, 2001); remote green and blue spaces with indoor or urban environments (Willis, 2011); herbal remedies with pharmaceuticals (Gather, 2011; Meurk, Broom, Adams, & Sibbritt, 2013); and physical activity and diet with surgery (Mattingly, Stambush, & Hill, 2009; Sassatelli, 2000). Indeed, there is a conflation of “natural” with “healthy.” This is largely based on the assumption that natural products and processes are inherently healthy, or at least healthier than synthetic substances or procedures such as pharmaceuticals, medical interventions (e.g., plastic or bariatric surgeries), or processed foods.

Pharmaceuticals, on the other hand, are often characterized as being synthetic (i.e., unnatural) and therefore less healthy than more natural remedies such as complementary and alternative medicines (CAM). For instance, researchers have

found that consumers of CAM, such as herbal remedies, acupuncture, chiropractic services, nutrition therapy, yoga, and tai chi, among others, frequently cite the naturalness of this type of therapy as influencing their decision making (Boon, Kachan, & Boecker, 2012; Meurk et al., 2013; Rozin et al., 2004). Natural medicines are thought to have fewer side effects and be less addictive, though perhaps less effective, than pharmaceuticals (Boon et al., 2012; Lewis, et al., 2015; Rozin et al., 2004).²⁰

An additional reason for the privileging of the natural is the way in which the human body is constructed as a purely “natural”, biological entity that is best served with other natural substances or one’s own hard work (e.g., Lupton, 1996). Dworkin and Wachs (2009) noted that consumer culture perpetuates this biological essentialism, or the idea that bodies are purely biological and can be enhanced through one’s hard work and with the purchase of the correct fitness products. The supposed naturalness of the body, as well as bodily processes such as physical activity, is further highlighted through Sassatelli’s (2000) ethnographic study of Italian gym culture. Many of her participants, for instance, made reference to the naturalness of exercise, or, the way in which exercise produced internal (physiological) changes brought about by one’s own effort. This was contrasted with the use of pills, steroids, surgeries, or other procedures in which the body is manipulated by external factors (Sassatelli, 2000).

Related to this, some researchers have found that exercise adherents ascribe to rigid diets consisting primarily of foods deemed to be natural or “clean” (i.e., organic, unrefined, potentially meat or dairy free). As noted by Musial (2016) in her

autoethnographic work as a yoga participant and instructor, references to clean eating infiltrated the conversations at the yoga studios at which she taught and practiced—sometimes to the point of obsession or ill-health (e.g., orthorexia). In this vein, it is notable that the original essay in which the term orthorexia was coined was published in the magazine, *Yoga Journal* (Bratman, 1997).²¹

To be clear, such preference for natural therapies or products is not a recent development, as evidenced by ancient spiritual or religious dictates, and, more recently, the clean living movement that began in the United States in the 1960s and 70s (e.g., Guthman, 2003; Knight, 2012). However, it can be argued that the increase in healthist imperatives to achieve optimum health by making “smart” choices or taking responsibility for one’s health, play a prominent role in its continued appeal (Brenton & Elliott, 2014; Musolino, Warin, Wade, & Gilchrist, 2015). It is also important to highlight the way in which preferences for the “natural” are predicated on false dichotomies between nature and culture (Dworkin & Wachs, 2009; Gather, 2011). As discussed in the theoretical portion of the literature review, the biological, psychological, sociocultural, and environmental processes can better be seen as inextricably intertwined, as opposed to discrete entities. Gather (2011), for instance, provides compelling examples of how supposedly “natural” herbal remedies, such as St. John’s Wort, while perhaps more natural than psychopharmaceuticals, are still processed and manipulated by humans and thus, not fully organic. Similarly, supposedly inorganic substances, such as antidepressants like Prozac, are comprised of both natural and synthetic components.

Pharmaceutical industry. Another reason for the strong endorsement of physical activity, particularly as it is compared with psychopharmaceuticals, can be seen to be related to the societal skepticism or distrust of the pharmaceutical industry. Pharmaceutical companies are multi-billion dollar global corporations that are critiqued for caring more about the bottom line than creating safe, effective, and necessary medicines. Some scholars argue that pharmaceutical companies are primary players in the increased medicalization and pharmaceuticalization of society (Abraham, 2010). More specifically, non-medical issues, such as mood swings, sleep disturbance, or sexual performance, are turned into medical issues (medicalization) that can be remedied with a pharmaceutical (pharmaceuticalization) (e.g., Fox & Ward, 2008; Tiefer, 2006).

Some go so far as to accuse the industry of disease mongering, or creating illnesses that can be prevented or cured with the right medicine (Moynihan, Health, & Henry, 2002). There is not merely a “pill for every ill”, but now, “an ill for every pill” (Mintzes, 2002, p. 909). In other words, the production of a pharmaceutical can lead to the development, or reification, of a disease. Things that were once mild nuisances, such as male pattern baldness, difficulty sleeping, or a lack of a libido, have been transformed into disorders that can be remedied by taking medication (Moynihan et al., 2002, Tiefer, 1996, 2006). Barker suggests that “pharmaceutical determinism” (Barker, 2011, p. 834)—which is facilitated through direct to consumer advertising—can lead to the overconsumption of medication. In addition to adverse side effects, prioritizing pharmaceutical solutions may obscure treatments or interventions that could be more effective, less costly, and more holistic, such as such as lifestyle or

structure changes, or complementary and alternative medicines (Fullagar, 2008a, 2008b).

Feminists have been particularly vocal critics of the pharmaceutical industry (and psychopharmaceuticals) due to the way it can be seen to locate the cause of women's suffering in her biology and psychology, as opposed to social inequality. Instead of focusing efforts on creating a more equitable society in which women no longer took on a disproportionate share of domestic duties, experienced sexual or domestic violence, were discriminated against in the work place or higher education, or were disenfranchised due to race, class, sexuality, or (dis)ability, the fields of medicine and psychology, it is argued, continue to focus primarily on changing individual women (Chesler, 1972; Fullagar, 2009; Kitzinger, 1993; Ussher, 2010). This "medicalizing [of] women's misery" (Ussher, 2010, p. 9) was aided by developments in pharmacology, such as the advent of tranquilizers in the mid-1950s, and more sophisticated antidepressants in the decades that followed. The diagnosis of premenstrual dysphoric disorder (PMDD) is an oft-cited example of such medicalization (and pharmaceuticalization). As noted by Chrisler and Caplan (2002), the adverse moods some women experience prior to menstruation are considered by many to be primarily, if not exclusively, the result of hormonal fluctuations. Women whose moods are particularly distressing may be diagnosed with PMDD, and prescribed the SSRI, Sarafem (which is chemically identical to Prozac, only remarketed). In addition, the adverse mood states women may experience, such as anger or aggression, are dismissed as being the result of chemical changes as opposed to—at least in part—normal and justifiable responses to unjust conditions (e.g., low

wages, disproportionate domestic duties, discrimination, violence). Instead, such biologically-based understandings of women's mental health reify essentialist understandings of women's bodies as being deficient and in need of fixing (Chrisler & Caplan, 2002).

From this perspective, the promotion of physical activity can be seen as a potentially less corrupt form of therapy as it is not tied to the pharmaceutical industry and its corporate interests. However, as touched on in the literature review, and described in more detail below, this reasoning is a misconception as physical activity promotion in the name of health is not without its own self-serving, corporate motivations, which also affect the way conditions—most notably at the moment, “obesity”—are understood and addressed in public health and other initiatives (Bercovitz, 2000; Fullagar, 2002; Jette et al., 2016; Piggin, 2014).

Kinesiology departments and the fitness industry. As argued by Krieger (2015), while (public health) science cannot, and should not, be reduced to politics, the political nature of science cannot be ignored. In this vein, the increased research and programmatic attention to the mental health benefits of exercise cannot be viewed as merely the result of value-free science that has found evidence of a pre-existing, taken-for-granted truth: that exercise produces positive health benefits. Instead, the reasons that exercise-focused research is being conducted, funded, and disseminated, can be seen as the result of a variety of ideological, political, and corporate interests (Andrews, Silk, Francombe, & Bush, 2013; Williams & Gibson, 2017).

As the majority of research conducted on exercise takes place within university settings, it is important to consider the way in which the politics of higher

education and research funding shape what knowledge production and dissemination. As noted by a variety of scholars, higher education is becoming increasingly corporatized (e.g., Andrews et al., 2013; Giroux, 2009). In an attempt to gain prestige and profit, university administrators demand that researchers bring in grant funding from the government, non-profits, or corporate sources. Researchers have found, however, that criteria for determining a research project's worth is dictated by narrow standards of quality (i.e., randomized clinical trials are deemed to be 'gold standard', while qualitative work is de-valued), and, at times, conservative political agendas (Andrews et al., 2013; Lather, 2004). For instance, there continues to be less government funding for research focused on minority populations (e.g., LGBTQ+ community, racial and ethnic minorities, women) or stigmatized diseases (e.g., lung cancer, alcohol abuse), in part due to the power of conservative politicians or the efforts of lobbyists (Best, 2012; Coulter, Kenst, Bowen, & Scout, 2014). As an example, only 16% US government funding for health research—with most of it coming from the National Institutes of Health (NIH)—is dedicated to mental illness (Chevreul et al., 2012).

In terms of exercise-specific research, Andrews and colleagues (2013) explained that the research produced in kinesiology programs is frequently funded by the U.S. military in an effort to create better soldiers as opposed to healthier communities; human bodies are treated as objects that can be measured and probed, as opposed to complex subjects who are the product of both biology and culture; and issues of social justice are overlooked in an effort to produce objective science that secures grant funding. Similarly, in their analysis of an exercise physiology lab,

Williams and Gibson (2017) found that the medicinal benefits of exercise were largely presented as uncontested fact. The supposedly causal link between engagement in exercise and health outcomes was not questioned, and issues of social justice—for instance, the development of effective ways to help marginalized populations become more active—were not adequately addressed. It can be argued that focusing on individual solutions (i.e., physical activity) to complex health issues is in line with the neoliberal political agenda (Andrews et al., 2013). Through government-funded research on physical activity, the onus is placed on the individual (with mental illness) to change, without providing adequate supports.

Additionally, the lack of attention to social determinants of mental health and holistic interventions that can help people with mental illness become more active can perhaps be seen as the result of a lack of interdisciplinary or transdisciplinary scholarships within kinesiology, and related departments (despite calls for collaboration; Rikli, 2006; Schary & Cardinal, 2015). Such complex interventions, particularly those that are bottom up, or formed with the input of community members, are most effective when developed and executed with the expertise of researchers, professionals, and community members with a variety of specialties. However, this type of research and program development is time and cost intensive, and arguably not valued within the culture of “speedy scholarship” (Andrews et al., p. 338) that permeates the corporate university.²²

Kinesiology departments, where some of the research on the mental health benefits of physical activity takes place, can also be seen to suffer from a crisis of legitimacy (Rikli, 2006), which can be seen to contribute to its vehement insistence

on the importance of exercise for (mental) health. Historically, physical education and kinesiology were disregarded as rigorous, academic fields of study. In an effort to bolster their status, scholars in the mid-20th Century made explicit efforts to increase the focus on science and research (Henry, 1964; Vertinsky, 2017). Unfortunately, exercise, physical activity, and sport too often continue to be reduced to leisure, or trivialized as an important topic of study by some within the medical community and other well-regarded disciplines, thus perpetuating kinesiology's underdog status (e.g., Henderson et al., 2017). In this way, the overselling of exercise as a medicine can be viewed as an attempt on the part of kinesiologists and scholars in other fields who study physical activity for it to be taken seriously by aligning itself with the medical community and public health.

Complementing the efforts of departments of kinesiology to raise the status of physical activity, are the promotional efforts of the fitness industry. Similar to how the pharmaceutical industry benefits from, and actively helps shape science related to (mental) illness, the fitness industry can be seen to be a key contributor to the production of (mental) health-related knowledge and programing (Malcolm, 2016; Neville, 2013). The promotion of physical activity as something that is health-enhancing—especially when such messages are coming from highly regarded institutions or government agencies— can be seen to directly benefit the fitness industry (Malcolm, 2016; Neville, 2013). From sales of yoga and gym club memberships and specialized apparel, to the sponsoring of physical activity initiatives such as Exercise is Medicine and Let's Move! by corporations such as Adidas, Technogym, and Anytime Fitness, the fitness industry's bottom line is bolstered

through the “exercise is medicine” ideology.²³ With the recent expansion of exercise-related products and technologies, such as Fitbits and other wearable technologies, fitness apps for the mobile phone, and physical activity-focused video games, such as Wii Fit, consumers are increasingly called on to not only be physically active, but monitor and track their (literal) every move as producers of valuable data (Lupton, 2013; Millington, 2016).²⁴ In this way, not only are physically active individuals with mental illness not burdens on the healthcare system as they are supposedly managing themselves and their illness, but they are actively contributing to the fitness economy. Ironically, such emphasis on incessant self-surveillance may exacerbate the symptoms of particular mental illnesses, such as OCD, eating disorders, or exercise addiction.

Attention to the ways in which exercise science and physical activity-related public health programming is intricately connected to political and corporate interests is not to suggest that the benefits of physical activity for mental health are invalid (something I return to in the next section). It is necessary, however, to understand the ways in which public health messages can be affected by politics. How, for instance, might the Exercise is Medicine initiative change—for better or worse—if Technogym was not a corporate sponsor? What types of new knowledge related to physical activity and mental illness might be produced if there was more government funding for mental illness, or if critical and feminist theories were privileged as much as traditional public health theories related to behavioral change? How might yoga—a multibillion dollar industry in the United States that is linked to myriad health

benefits—be understood and practiced if the Ancient Indian practice was not colonized and corporatized by Western industries?

Embodied experiences. While it is important to analyze the ways in which powerful ideologies, corporations, and government agendas shape the context in which exercise is promoted as a therapy, at the same time, its popularity cannot be reduced to this. If the messages did not resonate with people, such initiatives would fall flat. Indeed, in line with Marx's dialectic ontology described in Chapters Two and Three (Andrews, 2002), mental health consumers, survivors, and activists play an instrumental role in advancing such exercise is medicine narratives. In what follows, I explore the way this group shapes the promotion of exercise as medicine. I first focus on the way physical activity can be seen as an alternative to standard psychiatric care, and conclude with a discussion of the embodied pleasures that may be derived from being physically active. Not acknowledging the role of mental health consumers'/survivors' role in promoting exercise as a therapy is to deny their agency in shaping the current context, as well as the embodied experiences of physical activity and mental illness.

Consumer/survivor advocacy and disenchantment with the mental health system. As touched on previously, the popularity of physical activity as a type of treatment for mental illness may be linked to its departure from standard mental health care, which some argue continues to be ineffective at best, and dehumanizing at worst (Menziez, LeFrancois, & Reaume, 2013). Although mental health care in the United States has advanced tremendously with the discovery of more effective psychopharmaceuticals, de-institutionalization, and consumer/survivor focused

approaches to treatment, substantial problems with mental health treatment remain. For instance, the (mental) health system is de-centralized and fragmented, making it difficult for consumers to get their various needs met, which includes not only therapy, medication management, and physical healthcare, but supports that can facilitate educational, employment, and social opportunities (Geller, 2015; Perese, 2007).

Beginning in the 1960s with the anti-psychiatry movement, and continuing today with the consumer/survivor/ “mad” movement, researchers, healthcare providers, activists, and survivors of the psychiatric system argue that mental health care stigmatizes and dehumanizes individuals who do not fit societal norms in terms of ability or functioning (Menzies, LeFrancois, & Reaume, 2013). Ex-patients, or survivors, reported egregious abuses while being treated in asylums, such as forced treatment, harmful restraints, isolation, and even physical or sexual assault (Rissmiller & Rissmiller, 2006). The promise of a more humane and equitable existence for people with mental health issues post World War II, which included new legislation, increased government support, and a shift from treating people in asylums to administering care through community facilities (Grob, 1987), was not realized. In the years—and decades—that followed de-institutionalization in the United States, many people with serious mental illnesses were not receiving the services they needed for holistic well-being (Grob, 2016). This included a range of supports that are integral to mental health, such as education, employment, housing, recreational opportunities, and other social services. Myriad structural factors accounted for this, such as the increasingly corporatized and fragmented (mental)

healthcare system including a lack of government funding for mental health and substance abuse outpatient treatment facilities, fragmented mental health care services, insurance companies that did not cover psychological services to the extent they covered physical health care, and medications that caused undesirable side effects, prompting many users to stop taking them (Geller, 2015; Mechanic, 2006). Rampant stigma directed towards this population further marginalized them, limiting their opportunities for full inclusion (Perese, 2007).

While de-institutionalization was a necessary step in helping people with mental illness, the infrastructure was not in place. With the neoliberal government retrenchment of social services that came with the Reagan administration in the 1980s, the structural changes needed to ensure that the most marginalized members of society would receive adequate (mental) health care and related supports needed to thrive were compromised. Instead, the onus was placed on the individual to seek out care in an increasingly complicated, and disintegrated mental health system (Geller, 2015). As emphasized above, distress that could be seen as, at least in part, the result of social inequality (e.g., women's depression) was labeled by psychiatrists as a biologically-based disorder that could be remedied by pharmaceutical intervention, as well as talk therapy, which critics argue focuses solely on individual-level, as opposed to societal, change (e.g., Kitzinger, 1993).

At the same time that social services were being cut, there was a rise in incarceration rates, with people with mental illness and addiction, particularly people who faced the intersection of race, class, and sexuality or gender-identity-based oppressions, being disproportionately targeted (e.g., Chesney-Lind & Eliason, 2006).

For many, prison does little to help with mental health issues. In an effort to save money, prisons—many of which are now for-profit entities—provide minimal mental health services. Individuals face substantial barriers such as cost of treatment, long waiting lists, and few treatment options other than medication (Harner & Burgess, 2011; Hatton & Fisher, 2008; Hatton, Kleffel, & Fisher, 2006; Scott, 2004). Further, upon release, there is often a discontinuation of care and social support. This has created what scholars call a “revolving door”: without the proper supports to thrive, people with mental illness may end up back in prison (Baillargeon et al., 2009).

Further, critics continue to argue that even when individuals are able to receive treatment for their distress, the quality of care is often poor, particularly for people who are racial or ethnic minorities, lower income, part of the LGBTQ+ community, or marginalized in other ways. Healthcare providers may (unintentionally) misdiagnose consumers based on stereotypes or “statistical discrimination” (McGuire & Miranda, 2008, p. 397). African Americans, for instance, tend to be over-diagnosed for illnesses such as schizophrenia, yet underdiagnosed for affective disorders, such as depression (Snowden, 2001). While provider bias plays a role, diagnostic categories, and the criteria used to determine pathology, has been found to be discriminatory and fraught with biases along the lines of race, class, gender, age, ability, and sexuality (Caplan, 1995; Ussher, 2013). As an example, scholars have noted that personality disorders, in particular, borderline personality disorder and histrionic personality disorder, can be seen to pathologize women who either transgress gender norms (borderline personality disorder) or embody these norms to too great an extent (histrionic personality disorder; Ussher, 2013).

In this context, physical activity may be seen as divorced from the psychiatric system, which has disenfranchised so many people. Chapman and colleagues (2016), for instance, found that mental health consumers receiving outpatient treatment indicated that while they would like to be physically active and welcomed the support of exercise specialists, most did not wish to have doctors or therapists be part of that experience. Other researchers have found that people with mental health issues who participate in structured exercise programs appreciate when the program is not held in a healthcare setting, and are often not mandatory, which allows for a degree of choice and autonomy (Crone, 2007; Hodgson, McCulloch, & Fox, 2011). The previously mentioned programs that use sport as a hook to get individuals with mental health issues (particularly men) to access care can be seen a middle ground: participants are still interacting with healthcare professionals, yet in a different, non-clinical setting (Magee et al., 2015). However, public health attempts to link exercise with therapeutic outcomes can be seen as medicalizing physical activity, and may turn people off from participation (Fortier et al., 2016). In the aforementioned news stories about military veterans, for example, it seems that part of the appeal of physical activity is that one can do it by him or herself, without the aid of the healthcare system that, arguably, has failed many veterans. By connecting physical activity to medical care, those who had poor healthcare experiences, or stridently ascribe to norms of rugged individualism and (toxic) masculinity may be hesitant to engage in programming that could be beneficial (see, for example, Caddick & Smith, 2017).

Embodied pleasure. From a consumer/survivor perspective, the appeal of physical activity can also be seen as the result of the pleasures, joy, and fun

associated with movement. As a response to prescriptive, healthist ways of promoting well-being, some critical health and physical activity scholars are calling for more attention to the pleasurable (Booth, 2009; Hotchstetler, 2014; Phoenix & Orr, 2014; Pringle, 2010; Wellard, 2012), sensual (Allen-Collinson & Leledaki, 2014; Allen-Collinson & Owton, 2014; Caddick, Smith, & Phoenix, 2015; Humberstone, 2011), affective/ emotional (Caudwell & Rinehart, 2014; Roy, 2013, 2014; Thorpe & Rinehart, 2010); and playful (Frohlich, Alexander, & Fusco, 2013; Davidson, et al., 2006) aspects of movement.²⁵ While such components of physical activity can be derived from indoor spaces, I focus specifically on outdoor environments.

On an individual or intrapersonal level, being in the outdoors can bring about positive emotions/affects by evoking the senses. Many natural landscapes are visually pleasing and may be enjoyed for what they are, or even evoke awe and wonder. For people who are deprived of exposure to the outdoors—such as people with severe mental illness who are institutionalized—even being able to get out of their everyday surroundings and view natural landscapes from a moving vehicle can be a positive experience—something people with more privilege may take for granted (Bizub et al., 2003; Crone, 2007). Bizub and colleagues (2003) and Crone (2007) both found that individuals with mental illness who were involved in an outdoor exercise intervention (horseback riding and countryside walks, respectively) noted enjoying not only the intervention itself, but the entire process, which included van rides to rural environments. This is in line with research that has shown that simply viewing aesthetically pleasing outdoor scenes can elicit positive health benefits such as faster

recovery times from surgery, less aggression, and more positive moods (Maller et al., 2006).

Being in nature and viewing inspiring scenery, such as topographical features (e.g., mountains, streams), flora, and fauna, or haptically feeling the effects of nature has been found to enhance physical activity experiences. Compared to sterile fitness facilities, standing atop mountains in the wind and rain, feeling the power of the ocean while surfing, or watching animals can make one feel connected to something larger than their immediate social circle (Allen-Collinson & Leledaki, 2014; Caddick, et al., 2015; Cosgriff, Little, & Wilson, 2009; Loeffler, 2004). It can evoke a spiritual connection, which some describe as a religious experience (Humberstone, 2011; Loeffler, 2004). This also speaks to the interrelated nature of humans and the more-than-human world. In this example, animals and the natural environment, including weather, can be seen as agentic, helping to construct particular affective, sensual experiences in people.

The affective, or non-representational aspects of moving in natural spaces has been well-documented in alternative sporting spaces, such as surfing, skating, and snowboarding. Booth (2009) gave attention to the importance of pleasure through his work on surfing cultures. His research described the affective pleasure—commonly referred to as ‘stoke’—that comes with surfing. Stoke is not the sole result of simply moving one’s body, but produced by holistically engaging the mind, body, and environment. Even seeing particular bodies in outdoor spaces, such as lesbian surfers in wetsuits, has been found to elicit affective responses that cannot be reduced to the discursive or social (Roy, 2013).

Interestingly, the pleasurable aspects of outdoor physical activity are not limited to the exact moment in which one is in that space. Phoenix and Orr (2014) found that older adults derived benefits from reflecting on their time spent engaged in pleasurable physical activity. In this way, one's past participation in outdoor activities can be reflected upon in order to elicit an affective or emotional response. Based in part on this finding, Phoenix and Orr seem to privilege the social dimensions of the production of space and its ability to produce positive emotions. Unlike scholars who view affective response to particular landscapes as based on pre-social physiology, Phoenix and Orr (and Wellard, 2012) believe that one's preconceived beliefs and prior experiences within a space, as well as cultural meanings tied to a place, are what produces affective/emotional responses.

In this way, compared to other forms of treatment that may have undesirable side effects, particular types of physical activity may be a welcome alternative for those with mild forms of mental illness, or a pleasure adjunctive treatment in conjunction with other types of therapy for people with moderate to severe mental illness. (This, of course, is not to suggest that physical activity is free from side effects; Malcolm, 2016.)

Conclusion

The aim of this chapter was to identify what is being said about physical activity as a treatment for mental illness, and why such narratives are given meaning at this particular juncture. The mental health benefits of physical activity cannot be seen as pre-given, or taken for granted, but constructed by a variety of sociocultural, political, economic, ideological, technological, and biological

processes. Overall, there are a range of narratives put forth related to the therapeutic benefits of physical activity. The majority of these discourses are relatively nuanced, and do not propose that exercise is the best or only strategy to help treat various mental health issues. However, a smaller—yet significant—number of documents were seen to put forth sensational, simplistic understandings of mental illness, such as the idea that exercise could be a cure for a given mental illness, or that it is superior to, or could replace, pharmaceuticals. In taking a closer look at these narratives, and placing them in the larger context, I came up with five themes that capture some of the dominant ideologies and social forces that render such narratives meaningful: 1) the US's (and other Western nations') adherence to healthist, neoliberal ideas that valorize hard work, individual responsibility, and self-restraint (Protestant work ethic); 2) the privileging of that which is natural; 3) societal distrust of the pharmaceutical industry; 4) the power of kinesiology departments and the fitness industry; and 5) the role of mental health consumers'/survivors'. Interestingly, the various social processes and logics that can be seen to shape some of the more extreme messages are fraught with contradictions and misconceptions, such as the idea that something like physical activity—especially when aligned with the medical industry—is less influenced by corporate control than pharmaceuticals. Or the belief that pharmaceuticals are unnatural and come with a host of side effects, and exercise, conversely, is wholly natural and free from adverse effects.

I do believe that exercise can add value to the lives of people with mental illness, and the media, public health initiatives, and other sources can help to spread the message and potentially make it more accessible to this population. However, as

will be explored in subsequent chapters, such messages must be more nuanced and sensitive to the reality of people's lives, lest they be ineffective at best, or harmful, at worst. In the next chapter, I take a closer look at the Exercise is Medicine initiative to understand how mental illness is being addressed at the meso level.

Chapter 5: Exercise is Medicine Website Analysis

Increasingly, exercise or physical activity, is being promoted as a cost-effective adjunctive or preventative treatment for mental illness (Biddle & Mutrie, 2007; Fox, 1999; Scully et al., 1998; Stathopoulou et al., 2006; Taylor, Sallis, & Needle, 1985). While physical activity may have the potential to improve the health and quality of life for people with mental health issues, the challenge is how to make physical activity more accessible, meaningful, and sustainable for this population. In response, a plethora of physical activity programming aimed at people with mental illness has been developed in the United States and other Western nations. As discussed in the literature review, this takes myriad forms ranging from relatively small-scale interventions or programming in settings such as hospitals, rehabilitation centers, community mental health clinics, local community recreation facilities, or outdoor settings (e.g., Bizub et al., 2003; Fogarty & Happell, 2005, Lesley & Livingood, 2015), to larger public health initiatives such as exercise referral schemes, or government-funded initiatives, such as the US's "I can do it, you can do it" peer-mentor health promotion program for people with disabilities (Kemeny, Arnold, & Marge, 2011).²⁶

While many of the aforementioned US-based programs that are of a smaller-scale have been analyzed, to some extent, there remains a dearth of analysis of some of the larger public health efforts, such as the Exercise is Medicine (EIM) initiative. In the United States, EIM is one of the major programs dedicated to increasing the uptake of physical activity for those experiencing—or at risk of developing—chronic conditions, including mental illness. EIM, which started in 2007 as a joint initiative of

the American Medical Association (AMA) and the American College of Sports Medicine (ACSM), is an exercise referral program whereby medical doctors prescribe physical activity to patients. Although relatively new, it is a growing movement, as evidenced by its global expansion, growth of resources (e.g., website, books, journal articles, certification programs), and list of funders including Adidas, Anytime Fitness, DJO Global, and Technogym (and formerly Coca-Cola). The EIM initiative also aims to help underserved populations, as suggested in the following excerpt from the EIM website:

EIM wants to be part of the solution in reducing chronic diseases, obesity, and physical inactivity in communities that lack safe places to play and exercise, and where fresh, healthy food is not easily accessible or, community programs are not readily available...EIM aims to address the barriers that these populations face and work to both educate and empower these groups to engage in regular physical activity, as well as create access to physical activity opportunities through local healthcare systems and community organizations that align with their cultures and values. (“EIM in Action”, 2017)

However, despite these stated concerns, it is unclear to what extent the initiative provides support and resources in order to make exercise widely available to people with various forms of distress in a safe and effective manner. In what follows, I examine the EIM website which, in my view, is the EIM material that is most accessible to health care practitioners, exercise specialists, and the lay public. The goal of the analysis is to identify how mental illness is, or is not, being addressed through the EIM initiative, including the provision of resources or information related

to mental illness and physical activity programming focused on people with mental illness. Importantly, the intention is to make recommendations in an effort to potentially improve EIM so that it can better meet the needs of people living with mental illness. I begin by contextualizing the EIM initiative by providing background on exercise referral programs, as well as literature pertaining to the potential strengths and challenges of prescribing exercise to individuals with mental illness.

Situating the EIM Initiative

Exercise referral programs and mental health. Beginning in the early 1990s, Western nations such as the United Kingdom and Australia began to institutionalize exercise as a form of medicine through exercise referral schemes. In the UK, for instance, exercise programs and interventions for people with a range of chronic illness (e.g., obesity, heart disease, mental illness) were subsidized by the National Health Service (NHS), helping to provide the chronically ill population with a low-cost way to engage in structured, supervised physical activity (Dugdill, Graham, McNair, 2005). Though the programs provided through these referral schemes varied, the ultimate goal focused on the physiological benefits of physical activity (Crone, Smith, & Gough, 2005; Dugdill et al., 2005).

At first glance, such programs seem to be in line with public health's focus on prevention, and as such are something of a diversion from the 'treatment' and 'cure' based approach taken throughout much of the twentieth century, and which has been critiqued for its reductionist understanding of health and the body (Brandt & Gardner, 2000; Krieger & Smith, 2004). Moreover, the government-funded exercise referral programs mentioned above seem to address a concern commonly levied at physical

activity initiatives, namely that they are underfunded, and in particular, do not provide necessary attention to vulnerable populations (see for example, Bercovitz, 2000; Piggin, 2014). However, as touched on in the literature review, the exercise referral programs have been critiqued on several grounds. Scholars have questioned the effectiveness and utility of the programs, particularly those in the UK and Australia. For instance, the manner in which the schemes—their conceptualization, implementation, and evaluation—privilege physiological changes related to exercise, as opposed to taking into account health-enhancing psychological and social benefits, has been a point of contention for over a decade (Crone, Smith, & Gough, 2005; Dugdill et al., 2005). The programs have also been critiqued for their short-term nature (Dugdill et al., 2005; Henderson et al., 2017), low adherence amongst marginalized groups of individuals (Crone et al., 2008; James et al., 2008), and questionable cost effectiveness (Pavey et al., 2012; Williams et al., 2007). The potential ineffectiveness of such schemes can be seen as a result of their implementation that was largely based on political agendas as opposed to evidence-based science (Sowden & Raine, 2008).

The EIM initiative in the United States has also been questioned, but less attention has been paid to the implementation or efficacy of the programs. Rather, the ideological underpinnings of the initiative have been problematized. Neville (2013) and Malcolm (2016) have critiqued its simplistic linking of fitness with health, which ignores the, at times, unhealthy aspects of exercise. They also take issue with its promotion of individual, market-based solutions to chronic disease, which can be seen to be largely the result of social conditions that remain unchanged (see also,

Fullagar, 2017). Hochstetler (2014) takes a similar stance, arguing that EIM is equating physical activity solely with health, as opposed to the myriad benefits people derive from movement, such as pleasure, fun, or general well-being. I am sympathetic with these concerns and indeed, pick up strands of them in my own discussion to follow. However, I do not wish to dismiss the EIM program out of hand; instead, I view it as a potentially useful initiative for individuals experiencing mental illness, as evidenced by the growing body of literature that documents the positive relationship between physical activity and mental health. Systematic reviews of the literature on mental health interventions commonly report that participants identify biological, psychological, and social improvements in the following areas: increased social interactions; a newly found sense of purpose and empowerment; trust in fitness specialists; safety derived from being in a supportive environment (i.e., not an appearance-focused fitness facility); improvement in symptoms (reduction in ruminations, improvements in mood and sleep); and reconnection with a former athletic self, or the formation of an identity not attached to mental illness (Alexandratos, Barnett & Thomas, 2012; Ellis, Crone, Davey, & Grogan, 2007; Mason & Holt, 2012; Mura, Moro, Patten, & Carta, 2014).

Despite such benefits, a number of challenges have also been identified. Crone and colleagues (2008) found that people with mental illness who were given an exercise prescription were less likely to adhere than people with physical illnesses who were given a similar prescription. Reasons for low adherence rates identified in this study (as well as others) include, but are not limited to, the cost of participating in exercise programs (Crone, 2007; Hodgson, McCulloch, & Fox, 2011), symptoms of

mental illness and side effects of medications (e.g., anxiety, fatigue, weight gain and obesity, hallucinations) (Crone & Guy, 2008; Hodgson et al., 2011), and gender dynamics of physical activity programs (Crone et al., 2008; Crone & Guy, 2008; Hodgson et al., 2011). Significantly, some women with mental illness have noted that they would feel more comfortable exercising in single sex settings—not only due to body image concerns, but histories of trauma (McDevitt, et al., 2006; Raine, Truman, & Southerset, 2002). Stigma associated with people with psychiatric disabilities is also an important consideration, as research has documented that it leads to feelings of discomfort in public, impacting participation in physical activity outside of the home (Lassenius et al., 2013; McDevitt et al., 2005; McDevitt et al., 2006; Perese, 2007).

It is with these potential challenges and benefits in mind that I examine the EIM initiative in the United States. My aim is to build upon the body of literature exploring exercise referral programs (discussed above), and in the United States more specifically, where existing examinations are limited and the applicability of the initiative to those experiencing mental illness has not, to my knowledge, been examined. My analysis is informed by a social justice approach that is concerned with reducing health disparities. According to Braveman et al. (2011), health disparities are “systematic, plausibly avoidable health differences adversely affecting socially disadvantaged groups” (p. S151). Moreover, health disparities disproportionately affect groups who are already socially disadvantaged (such as individuals experiencing mental illness), which places them at a further risk with respect to their

health, making it even more difficult to overcome social disadvantage (Braveman et al., 2011).

In line with Braveman's description of health disparities, scholars have identified people living with mental illness as a population who experiences poorer health outcomes due not only to the symptoms of their disease, but myriad sociocultural and structural factors (e.g., stigma, lack of parity in mental healthcare funding, non-inclusive institutions) that make it difficult to access health-enhancing resources such as healthcare, employment, and leisure pursuits, including physical activity (Safran et al., 2009). In their review of the literature on physical activity levels among people with mental illness, Daumit and colleagues (2005) found people with mental illness tend to engage in less moderate to vigorous physical activity than people without such illnesses, with women being particularly at risk of being sedentary (Daumit et al., 2005; Janney et al., 2008; Janney et al., 2014). As mentioned above, this is not the result of individual shortcomings, but numerous barriers and a lack of resources needed to overcome such obstacles. The consequence of such insufficient attention to the needs of this population (at least until recently) has resulted in increased rates of chronic conditions such as obesity, diabetes, cancers, infectious disease, sexually transmitted infections, and heart disease among people with psychiatric illness (Perese & Perese, 2003; Robson & Gray, 2007).

The incidence and burden of disease is especially severe for those who face the intersectionality of oppressions: that is, people who are marginalized not only because of their mental health status, but other factors such as race, class, or sexuality. For example, racial and ethnic minorities, LGBT people, and lower income

individuals are at greater risk due to the health implications of constant (minority) stress (Aneshensel, 2009; Bostwick et al., 2014; McGuire & Miranda, 2008). People living with mental health issues are also at an increased risk of experiencing homelessness or incarceration, further affecting their ability to receive care (Baillargeon et al., 2009; Greenberg & Rosenheck, 2008).

Attention to social determinants of health and mental health disparities is in line with the ecosocial framework described in the literature review. Health inequalities, for instance, can be seen as the result of intersecting biological, psychological, and sociocultural factors. Importantly, however, specifically naming the social determinants of health as an area of concern emphasizes the role of macro-level factors in affecting health outcomes. As health has been—and often continues to be (Baum & Fisher, 2014)—conceptualized as the result of micro-level factors such as biology or behavior, increased attention to the way policies, institutions, cultural norms, and the political economy affect health, and resultant health inequities, is necessary.

With this in mind, if barriers to physical activity among people with mental illness are to be reduced or eliminated, programs such as EIM must provide adequate support and resources. In order to assess what type of information related to mental illness is provided by the EIM initiative, I reviewed the EIM website in January-February of 2017, and again in October 2017 while finalizing this chapter (as described in Chapter 3). I chose to focus on the website as I consider it to be a widely available and convenient resource for healthcare providers, exercise professionals, and the lay public. The website was organized with seven main headings at the top of

the page (“About”, “Evidence for EIM”, “EIM in Action”, “EIM Network”, “Partner with EIM”, “News & Updates”, “Resources”), as well as sub-headings underneath each heading, and second level subheadings beneath each subheading (see Chapter 3, as well as Appendices B and C).

The analysis of the EIM website is a part of the broader radical contextual approach that informs this project. In Chapter 4, numerous sociocultural, economic, political, ideological, and technological, processes were identified as shaping the exercise is medicine moment. Consumers’/survivors’ subjective experiences were also highlighted as a way of showing how a given phenomena is taken up, or resisted, by citizens in a dialectic fashion. This chapter builds on that analysis by identifying new—or similar—narratives, and social processes or forces that inform such narratives. This allows for a more fully developed contextualization of the current exercise is medicine moment.²⁷

Findings and Discussion

Upon analyzing the content provided on the website, it was clear that mental illness was not given substantial attention. Further, the information provided on mental illness and physical activity could be seen to be limited and, at times, to promote misconceptions. This was surprising given the EIM’s aim to help underserved populations. Overall, it seemed that promoting the EIM brand, and emphasizing the monetary value of the “EIM Solution” trumped the lived experience of being physically active while living with a chronic disease. I identified three themes that capture these critiques, and proposed various strategies to improve the website: 1) Healthcare providers and fitness specialists require more resources; 2)

Underserved populations require more resources; and 3) Humanizing EIM: Prioritizing people over money and entrepreneurialism.

Healthcare providers and fitness specialists require more resources. As previously mentioned, the therapeutic potential of exercise for people with mental illness has received increasing attention in the past two decades, and this is reflected in portions of the EIM material. For instance, in the ‘Evidence for EIM’ portion of the website in the subcategory of ‘Physical Activity and NCD’ [non-communicable disease] there is a link to the EIM Factsheet, which lists the various health benefits shown to come from engagement in physical activity. Included on the factsheet is a strong endorsement that physical activity “[c]an decrease depression as effectively as Prozac or behavioral therapy.”²⁸ Thus, the EIM initiative clearly promotes physical activity as therapeutic for mental health concerns; however, and as I outline in what follows, given the complexity and range of mental illness—particularly when designing effective exercise interventions—the resources provided are arguably insufficient (Faulkner & Taylor, 2009; Stanton & Happell, 2013). I begin by analyzing information found on the site that addresses mental illness. From there, I discuss the gaps, or the ways in which mental illness is *not* included in some of the resources provided for healthcare providers and exercise specialists.

To the best of my knowledge, the most explicit and extensive reference to mental illness on the website is a two-page informational sheet related to exercising with anxiety and depression. This is found in the Resources section of the website, under “Your Rx for Health Series.”²⁹ After a relatively brief description of how anxiety and depression can be improved, or prevented, with physical activity, the

reader is provided with more specific information related to how to get started exercising, the types of exercise and frequency that may be effective, and some exercise cautions, such as not exercising if in pain, and assessing if medications may affect one's ability to exercise safely.

While it is important that mental illness is being addressed in the Your Rx for Health Series, it is concerning that only one handout is dedicated to such a multifaceted health issue. For instance, given the spectrum of anxiety and depressive disorders, two-pages cannot begin to address an individual's needs in any meaningful way. Anxiety disorders take different forms including phobias, panic disorder, and generalized anxiety disorder (American Psychiatric Association, 2013). Affective disorders such as depression, on the other hand, may include major depressive disorder, which could render a patient unable to carry out daily activities of living, let alone exercise, or more mild forms of dysthymia that last for longer periods of time and can also significantly impact quality of life (Rapaport et al., 2002). In addition, there are high rates of co-morbidity, or the co-existence of depression and anxiety (and potentially other mental illnesses or substance abuse issues) experienced by a particular individual at a given time (Nisenson, Pepper, Schwenk, & Coyne, 1998), as well as increased rates of anxiety and affective disorders following events such as pregnancy or myocardial infarctions (Farr et al., 2014; Lane et al., 2002; Matthey et al., 2003).

Such a range of conditions, though sharing some commonalities, are too unique to be addressed in only two pages. One could argue that the handout is just a first step, and ideally one would consult with an exercise specialist to 'fill' their

prescription. However, the research indicates that adherence to exercise prescriptions—particularly for people with mental illness—is relatively low (Crone et al., 2008) and, therefore, it should not be assumed one will ever receive more information on exercising with an affective or anxiety disorder than the handout (accessed on the website, or provided by a healthcare specialist). For people with mild distress, this may not pose a problem, but for more severe cases of anxiety or depression, such limited information may exacerbate one’s symptoms and compromise their recovery. Furthermore, the absence of information pertaining to other mental health issues (e.g., schizophrenia and schizoaffective disorders, bipolar disorder, OCD, eating disorders) leaves healthcare providers and patients without any relevant information regarding how physical activity may impact their health.

In addition to needing more information than what is provided by the handout, the content that is provided can be seen to promote some—at times, dangerous—misconceptions about anxiety and depression as they relate to physical activity. The handout begins by stating: “Many studies show even just one exercise session can lower anxiety and make you feel calmer. The effect is similar to meditation or taking medication. Long-term, regular activity lowers anxiety, especially for people who are very anxious.” Such statements are strikingly vague, and make many generalizations. For instance, for somebody with a moderate to severe form of generalized anxiety disorder or depression (similar statements comparing exercise with medication are made when discussing depression later in the handout), one session of physical activity is not likely to have a similar effect as a psychopharmaceutical. To suggest so is to promote misinformation that could: 1) deter somebody from seeking appropriate

treatment; or 2) discourage an individual who may exercise and not feel better (see also, Chapter 6). Readers may be similarly discouraged by reading that all one really needs to get started exercising is a “good pair of shoes”. As noted in previous chapters, people with mental illness often face formidable barriers to being active. Though the suggestion that one need not invest in expensive equipment or gym memberships may be encouraging for some, for others, it can be demoralizing. Further, for individuals who are impoverished—and people with severe mental illness are more likely to experience poverty—a good pair of shoes is not a trivial expense.

Other resources provided on the website were found to be devoid of necessary references to mental illness, with screening tools for healthcare providers and exercise specialists being an example. Before prescribing exercise, healthcare providers are instructed to first conduct a safety screening to ensure that a patient is healthy enough to begin an exercise program. The assessment tool that is included in the Action Guide takes the form of a logic model that screens for the presence of cardiovascular, metabolic, or renal disease. By using this guide, however, the provider is not encouraged to evaluate for symptoms such as anxiety, depression, psychotic episodes, and excessive concerns about food or eating. As exercise can, in some circumstances, exacerbate symptoms of mental illness, such as manic episodes (e.g., Wright et al., 2012), not screening for mental health issues could be dangerous to the patient’s health. While mental health specialists visiting the website may not need screening tools as a client’s mental health status is likely to be known to them, general practitioners may be unaware of the presence of mental illness in their patient. As

such, having a separate form that assesses one's mental health, or incorporating mental health screening questions into the existing materials, is important.

Similar to the resources provided for healthcare practitioners, the materials for fitness professionals do not address mental illness in a comprehensive manner. Provided on the EIM website is a 'Health and Medical Questionnaire' and the 'Physical Activity Readiness Questionnaire Plus (PAR-Q+), which exercise specialists are advised to administer to clients prior to beginning an exercise program. However, past or current symptoms associated with mental illnesses are not included as acute or chronic conditions of which fitness professionals should be aware. Instead, in line with the screening tools for healthcare providers, physical ailments, such as lung disease, diabetes, and cardiovascular issues, are privileged. As previously mentioned, the failure to screen clients for mental illness can adversely affect their motivation, progress, and overall enjoyment of the program, and in worse case scenarios, put individuals at risk of harm. Fitness professionals should be advised to screen for mental health issues, as it is not guaranteed that the referring physician discussed mental illness with the patient. Additionally, a lack of attention to mental health in the resources provided for healthcare and fitness professionals is not only a safety concern, but it misses an important opportunity to normalize and de-stigmatize mental illness and advance a more holistic understanding of health.

Screening, of course, is not enough in and of itself. The exercise specialist must be able to adapt the exercise program to the needs of an individual with a particular mental illness, and understand common co-morbidities and how they may affect participants' abilities to be active. As a great number of people with mental

illness are not diagnosed, and stigma may prevent such individuals from readily disclosing their symptoms to healthcare providers and fitness specialists, it is up to healthcare providers, including exercise professionals, to bring up mental health issues in a way that allows for disclosure. This can be accommodated with appropriate training. To be clear, I am not suggesting exercise specialists act as therapists or psychiatrists, but that they are knowledgeable enough to assess for mental health issues and, in conjunction with other professionals, such as mental health nurses, social workers, and general practitioners, tailor exercise programs accordingly (Stanton & Happell, 2013; Williams & Streat, 2006).

While exercise professionals are instructed to receive proper accreditation by a professional physical activity governing body and participate in ongoing training, they are not required to be well-informed with regard to the relationship between mental illness and physical activity. In surveying fitness specialists in Sweden, Bratland-Sanda & Sundgot-Borgen (2015) found that only 29% had adequate knowledge of eating disorders, and only 47% had knowledge related to their facility's response to a client who seems to have an eating disorder. Similarly, Manley, O'Brien, and Samuels (2008) found that the majority of fitness instructors in their (Canadian) sample had difficulty recognizing the presence of anorexia nervosa when provided with a vignette, and only 60% believed there was some ethical concern to intervene. Among accredited exercise physiologists in Australia, Stanton (2013) that 15% of participants in his study had not received any formal training related to mental illness and exercise prescriptions, and 52% had not received any professional development or training related to the topic. Additionally, only 10% indicated that

they would consult with a healthcare provider when working with somebody with a mental illness.

Such a dearth of knowledge related to mental illness can be seen to be related to the lack of information provided in fitness-related training certification programs. In the US and many other countries, there is not a national certification process or requirement for fitness specialists. Instead, certification can be acquired through a variety of organizations that compete with one another for participants (and profit). Some of the more reputable ones include the American College of Sports Medicine (ACSM), American Council on Exercise (ACE), National Strength and Conditioning Association (NSCA). While some organizations provide attention to “special populations”, or inclusion of people with a range of disabilities (e.g., ACSM’s Certified Inclusive Fitness Trainer), which may include people with mental health issues, the majority of the certifications one can choose from to be a fitness professional do not discuss mental illness in a meaningful way, if at all.

In an attempt to ensure fitness specialists are equipped with the knowledge and skills needed to work with people with chronic conditions, EIM has developed a certification of its own. In order to receive the level three credential, which allows an exercise specialist to work with individuals in need of monitoring, one must fulfill the following requirements, as taken straight from the ACSM’s site (<https://certification.acsm.org/exercise-is-medicine-credential>):

- Approved MS/MA Exercise Science/Exercise Physiology/Kinesiology
OR approved BS/BA in Exercise Science/Exercise

Physiology/Kinesiology plus 4,000 hours of experience in a clinical exercise setting.

- NCCA or ANSI/ISO-accredited clinical exercise certification³⁰
- EIM credential course and EIM credential examination exempt for those with ACSM CEP or ACSM RCEP.³¹

Such credentialing, though not without critiques (discussed below), is a step in the right direction. In the Powerpoint presentation from the EIM credential workshop held in March of 2012, there is a section on “mental health and depression”, with eight slides dedicated to the topic. The slides provide information related to barriers that people with depression may encounter when being physically active (e.g., drowsiness if on medications; low self-esteem), the need for fitness specialists to evaluate for substance abuse and refer to healthcare providers accordingly, and basic exercise guidelines.³² While such attention to depression in the EIM credential workshop is important, similar to my previously stated concerns, more information related to a range of mental illnesses is needed.

One way to address this is for EIM to establish a special certification for fitness professionals interested in working with people with mental illness. This would provide specialists with a more in-depth understanding of all mental illnesses and better help them design programming to meet the individual’s needs. This, however, would be most advantageous if a healthcare provider knows that a patient has a particular mental health issue and can refer to a specialist with this particular credential. If a general practitioner is unaware of the existence of mental illness in a particular patient, having access to fitness professionals who specialize in mental

illness would be a moot point as they would not know to refer the patient. In that way, specialized training in mental illness is not only needed for fitness professionals who are interested in working with this population, but greater attention to mental illness needs to be incorporated into the EIM credential program so all providers have adequate knowledge related to mental illness.

Taking this a step further, I argue that attention to mental illness should be a requirement for all fitness professional certification programs. For instance, EIM credentialed specialists may not be available in all parts of the country—particularly low-income or rural areas. If all certified fitness professionals had training related to mental illness, this would allow for a (potentially) higher level of care for people with mental illness. In addition, research suggests that fitness providers are open to learning about how to help people with mental illness, particularly depression (Moore, Moore & Murphy, 2011; Stanton, 2013), supporting the need for additional training.

Importantly, such training should go beyond individual-level barriers to engagement in physical activity (e.g., fatigue, self-esteem), and account for socio-environmental issues that may facilitate or inhibit physical activity, and affect how each individual navigates the world and is treated by others. Such factors include, but not limited to, the built environment (e.g., presence of sidewalks, parks), stigma, and the intersection of oppressions (racism, classism, heterosexism, etc.). Indeed, being educated about how racism, heterosexism, sexism, classism, ableism and other injustices affect exercise participants' experiences is paramount if comprehensive, inclusive programming is to be developed. Providing intake questionnaires that

screen for participants' mental and physical health concerns, as well as their experiences with physical activity as it intersects with discrimination, discomfort, or stigma, could help exercise providers better understand their clients and how to ensure their unique experiences and subjectivity is taken into account in order for them to get the most out of the physical activity program and, most importantly, develop a love of movement that can stay with them long past the exercise program's end.

In its current iteration, the EIM Credential workshop—and website as a whole—does not address such factors in much detail. There is a strong emphasis on behavioral change, with a nod given to understanding how the environment impacts individuals' access to physical activity. However, there does not appear to be an in-depth discussion of the aforementioned social determinants of health, or the fitness professionals' role in advocating for structural level changes. One way to remedy this is through increased information related to social determinants of health provided on the website and credentialing program, as well as a broadening of the fitness professionals' role in mitigating health disparities. Instead of focusing exclusively on the individual, fitness professionals could be encouraged to see themselves as advocates of change at all levels. In that way, fitness professionals should be given more information related to social determinants of health, and encouraged—and taught how—to work toward more systemic changes in the form of the built environment, addressing stigma and discrimination, reducing income inequality, and so on.³³

Underserved populations require more resources. As articulated above, due to the health disparities experienced by people with mental illness, and the myriad barriers to engagement in physical activity, increased attention to making physical activity accessible to this population is warranted. However, in the portion of the EIM website dedicated to ‘underserved populations’, people with mental illness are glaringly absent (groups that are listed include people with physical impairments, racial and ethnic minorities, LGBTQ population, among others). If EIM is to fulfill its promise of helping “those in greatest need”, it is important that people with mental illness are not only included in the underserved populations section, but adequate resources be provided in order to make it possible for such individuals to access physical activity. EIM in the US is at a disadvantage as there is not a national healthcare system that can help subsidize exercise programs developed for marginalized populations. Without such funding, it is more of a challenge for people to access physical activity, and for comprehensive physical activity programs for people with mental illness to be developed and, importantly, maintained in the long-term. In the remainder of this section I expand on these problems and provide recommendations as to how EIM can work to mitigate some of the financial and programmatic constraints. (See also, Maier & Jette, 2016, as that commentary informed this sub-section.)

As it currently stands, people who are prescribed exercise are expected to “fill” their prescription on their own time, and with their own money as in the US there is not a national funding source in place that subsidizes such prescriptions. People with severe mental illness are often living on a low income as they are likely

to be unemployed (Perese, 2007; Wilton, 2004), thereby making exercise financially difficult (e.g., the expense of clothes, shoes, transportation, childcare). If one needs to work with an exercise specialist, the time and money required is even more onerous. The fact that fitness facilities are for-profit entities that often charge membership fees and may not be located in areas easily accessible by public transportation, plus the inadequate number of publicly funded recreation facilities in areas where lower income individuals live, can make it difficult for people with a lack of resources to find physical activity options that fit within their lifestyle (Dahmann et al., 2010; McLaren, Rock, & McElgunn, 2012; Taylor et al., 2007).

In the US, some organizations serving people with mental illness, such as community mental health centers, have teamed up with foundations, non-profits, universities, or community organizations in order to address many of the barriers to physical activity, including financial constraints (see, for example, Chwastiak, 2015). For instance, in the In SHAPE health intervention, which aimed to increase physical activity and healthy eating among people with mental illness attending a community mental health center, health mentors (fitness specialists given additional training for the purpose of the intervention) helped participants learn about, and stay motivated engaging in, healthy eating behaviors and exercise techniques through weekly meetings and follow up phone calls when necessary. Through a partnership with a local YMCA, program participants were able to utilize such services free of charge (Van Citters et al., 2010; Bartels et al., 2013). Similarly, an International Center for Clubhouse Development (ICCD) certified Clubhouse (psychiatric rehabilitation community) in Massachusetts teamed up with a local college of medicine in order to

develop a fitness program designed to get Clubhouse members more active (Pelletier et al., 2005). Participants, under the guidance of exercise specialists, were provided with opportunities to engage in a range of physical activities at a local medical center's fitness facility at no cost and with transportation provided (Pelletier et al., 2005).

Similarly, two examples of collaborative nature-based therapeutic programs in the United States include a therapeutic horseback riding program (Bizub et al., 2003), and a social worker-led outdoor adventure program (Kessell, 1994). The therapeutic horseback riding initiative took place as a joint effort between a psychiatric rehabilitation program and horseback riding venue in Connecticut. Participants were able to get out of the psychiatric facility for an afternoon, enjoying a car ride, lunch, and horseback riding (and related activities). Staff at the horseback riding organization received a brief training session from the rehabilitation staff on how to work with people with various forms of distress (Bizub et al., 2003). The social worker-led outdoor program, on the other hand, took place in Minnesota and was subsidized by a health maintenance organization (HMO), which allowed female participants of various socioeconomic statuses to participate at a relatively low cost (Kessell, 1994). The leader, who had experience leading Outward Bound groups as well as administering talk therapy, had the women engage in activities such as yoga, dance therapy, rock climbing, and a group obstacle course. The skills learned through the various physical activities translated into improved self-confidence, problem solving, and self-esteem in other areas of their lives (Kessell, 1994).

Such initiatives have been found to be effective, though their sustainability is questionable due to the expense of the programs. This is concerning as people with severe mental illness tend to benefit more from ongoing programs versus a short-term intervention (Richardson, et al., 2005). As an example, in a review of an In SHAPE program in Michigan, researchers found that once the individualized portion of the program ended (i.e., one-on-one sessions with fitness specialists) and optional group-based exercise classes commenced, participation in the program decreased significantly (Lesley & Livingood, 2015). Additionally, while such programs may serve people attending a particular organization, or living in a specific community, their scope is limited. Indeed, those most marginalized—such as incarcerated or homeless women with mental illness—are the least likely to benefit from such programming (e.g., Klitzing, 2004; Meek & Lewis, 2014). EIM, therefore, must help make funding for comprehensive physical activity programs available in various settings that provide services for people with mental illness such as psychiatric rehabilitation centers, homeless shelters, and prisons and jails.

While a section of their website is dedicated to ‘community organizations’, little is provided in the way of how such organizations can secure the financial resources needed to effectively address some of the barriers to physical activity mentioned above. Instead, the resources seem to focus on how people working within particular settings can take it upon themselves to bring EIM to their organization (see, for instance, the section on ‘campus communities’). A more effective approach might be for the EIM initiative to team up with non-profit agencies and foundations that are willing to subsidize the development and sustainability of comprehensive, evidence-

based physical activity and wellness programs for people with mental illness.³⁴ EIM-affiliated researchers and practitioners could make an effort to reach out to such entities in an effort to develop such programming. Parks and recreation departments may be particularly important collaborators, and in the past decade, there has been an effort to increase park use for public health reasons (Ewert, Mitten, & Overholt, 2014; Seltenrich, 2015). The National Park Services' (NPS) Healthy Parks Healthy People (HPHP) initiative is a prime example. Through research and development, the government program that was piloted in 2011 is working to better understand how to optimize the health of both people and the environment through creative use of parks (National Park Service, 2013).

Health practitioners and park personnel across the US have also been engaged in promoting the health benefits of 'park prescription' programs, in which healthcare providers write prescriptions for patients to visit a park (Seltenrich, 2015). Currently, park-based programming does not seem to focus on making nature-based programming accessible to people with mental illness, although the HPHP manual does recognize that this is a population for which more research and programming is needed, suggesting there is space for collaboration between EIM, HPHP and mental healthcare providers (National Park Service, 2013). Collaborative relationships could be fostered by organizing special panels or sessions at relevant meetings such as the International Society for Environmental Epidemiology conference (2015) that focused on green spaces and health, or at the US-based conference focused on park prescriptions that took place in 2016 (Seltenrich, 2015). The EIM website could serve as a hub that could also facilitate such collaboration by helping to connect public

health professionals interested in making physical activity more accessible to people with mental illness (as well as other marginalized groups). (See, for example, Pérez & Martinez, 2008.)

Increasing access of nature-based physical activity is a worthy goal as it moves exercise prescriptions beyond gym-based settings. Gyms and fitness facilities have been found to be unwelcoming or unenjoyable spaces for a variety of people, especially marginalized individuals. Such spaces are often equated with health, physical fitness, appearance, and performance (Slater & Tiggemann, 2011). Gym goers—particularly women—are expected to wear the proper (i.e., tight fitting, expensive) clothing and move in ways that signify health, fitness, and heterosexuality (Markula, 1995). Such environments not only offer a limited range of physical activities (Cosgriff, Little & Wilson, 2009), but produce anxieties related to one's appearance and physical abilities (Hefferon et al., 2013; Rogers & Ebbeck, 2016). As many people with mental illness report feeling self-conscious with regard to their body image, comportment, and physical abilities, being in a fitness facility may not be conducive to helping such individuals increase their physical activity levels (McDevitt et al., 2006; McDevitt et al., 2005; Raine, Truman, & Southerst, 2002; Soudy, Faulkner, & Taylor, 2007).

As opposed to gym-based physical activity, and as discussed in the literature review, more holistic, nature-based activities have been found to be a meaningful leisure pursuit for many people (Maller et al., 2006). Engaging in physical activity in the outdoors may take the emphasis off of appearance and performance, and instead allows people to focus on building skills, strengths, and relationships (Maguire &

Priest, 1994; Whittington, 2006). Meaning and pleasure related to movement is frequently facilitated through interactions with nature, animals, and particular (outdoor) places that encourage the coming together of mind, body, spirit, and environment (e.g., Allen-Collinson & Leledaki, 2014; Humberstone, 2011; Rock, Degeling, & Blue, 2014).

Such outdoor experiences are often well-received by people with mental health problems (Bizub et al., 2003; Caddick, Smith, & Phoenix, 2015; Crone, 2007). Crone (2007) found that participants in a group-based exercise intervention in the UK that included countryside walks and education related to nature reported appreciating the psychosocial benefits of the intervention—the van ride into the country, engagement with nature through movement as well as education, socialization—not just the physiological ones. Similar benefits were reported by participants who took part in a horseback riding intervention geared towards people with mental illness (Bizub, Joy, & Davidson, 2003). Such physical activity programs not only allow for different types of movement, but provide opportunities for people to feel as though they are part of society (Bizub et al., 2003). Too often individuals with severe psychiatric disabilities have few opportunities for purposeful, meaningful activity (e.g., work, volunteering, caretaking, leisure), and spend most of their time in one place, such as a psychiatric rehabilitation center, group home, or prison, which limits their ability to participate in fulfilling occupations or leisure activities such as physical activity (Carless & Douglas, 2008b).

Ultimately, of course, the provision of government funding for such physical activity programs would be ideal, and could be something addressed through the

Prevention and Public Health Fund, an initiative created through the Patient Protection and Affordable Care Act (PPACA) that provides money for health prevention efforts (Shaw, Asomugha, Conway, & Rein, 2014). While this funding is mandatory (as opposed to discretionary), at the same time, Congress has the ability to redirect money from this fund to “non-public health legislative proposals” (American Public Health Association, 2012, p. 3). Unfortunately, such redirection of funds began almost immediately after the passage of the ACA (and this practice continues; American Public Health Association, 2012). It is also unknown what will become of the ACA under the Trump administration. Given the complexity of the United States’ funding for public mental health initiatives, it behooves EIM to team up with public health professionals in order to provide adherents to EIM with tangible ways of funding physical activity programs for vulnerable populations.

It is encouraging to see that the ACSM issued a joint statement with the Society for Behavioral Medicine imploring insurance companies to increase coverage for physical activity programming at community mental health centers (Pratt et al., 2016). As seen by the aforementioned outdoor therapy program covered by an HMO, increased insurance coverage for physical activity programming for people with mental illness can facilitate access. Unfortunately, however, there remains a disparity between coverage for physical health issues versus mental health issues (Mechanic, 2006). (This is related to mental health treatment in general, not just with regard to physical activity.) In a timely example, families have been suing insurance companies for not covering wilderness therapy programs for their children with mental health issues (Kowalczyk, 2017). For many families, this type of therapy is a last resort

when other forms of treatment have proven ineffective; however, some insurance companies do not view this type of programming as evidence-based.

Humanizing EIM: Prioritizing people over money and entrepreneurialism. One of the challenges to garnering the necessary funding and support from various stakeholders is the need to show or “prove” that not only is physical activity effective in improving the population’s health, but it is cost effective. This is a catch-22: while focusing on healthcare spending and cost effectiveness may be pertinent to the sustainability of EIM, overemphasis on economics can overshadow the main goal of the initiative which is to improve the health of people and reduce suffering.

The economic benefits of incorporating physical activity into the healthcare system were prominent on the EIM website (see also, Pullen & Malcolm 2017). In the “Evidence for EIM” section was a “Cost Effectiveness” sub-section in which readers were provided with economic justification for promoting physical activity: “Crucial to this desire for increases in delivery of physical activity promotion and counseling is the cost savings realized by employers and healthcare systems.” While it was acknowledged that non-monetary benefits come with increased physical activity levels, such as better mood states, increased quality of life, and impact on earnings,³⁵ the resources provided in this section focused exclusively on the economic costs of physical inactivity. This is evidenced by articles entitled: “Relationship between modifiable health risks and short-term health care charges” (Pronk, Goodman, O’Connor, & Martinson, 1999), “Higher direct medical costs associated with physical inactivity” (Pratt, Macera, & Wang, 2000), and “Economic evaluation and

transferability of physical activity programmes in primary prevention: a systematic review” (Wolfenstetter & Wenig, 2010). It is important to note that the extensive focus on the value or cost savings of exercise disregard the ways in which increased physical activity can lead to injuries, or other health problems, thus incurring costs on the healthcare system (Guskiewicz, 2011; Malcolm, 2016; Pullen & Malcolm, 2017). Further, scholars have argued that exercise referral programs are largely not effective in enrolling—and maintaining—those who need it the most, thus calling to question its cost effectiveness (Sowden & Raine, 2008; Williams et al., 2007).

Another way in which EIM focused on cost effectiveness was by positioning itself as part of a Population Health Management approach to healthcare. This form of healthcare administration was described in the “Healthcare Systems” section of the website as follows: “In today’s healthcare environment, as a result of the Affordable Care Act (ACA) and the Health Information Technology for Economic and Clinical Health (HITECH) Act, health systems must transition into value-based care. Population Health Management (PHM) is the key to improving health outcomes and reducing costs.” Readers are provided with a link to the HealthCatalyst website for more information on Population Health Management. HealthCatalyst is a for-profit company that develops and sells computer software that help healthcare organizations optimize their operations by identifying the most at-risk patients, as well as the best treatment for those patients based on aggregated evidence-based data (HealthCatalyst, 2016).³⁶

The importance of cost effectiveness is also reiterated in some of the materials provided for exercise specialists. In the Health and Fitness Professionals’ Action

Guide, a 25-page document with information related to how exercise specialists can work with healthcare providers and secure a steady client base, exercise professionals were instructed to emphasize to healthcare providers how their services would help them make or save money. For instance, the following is suggested as a script for when a physician returns a call:

This is your opportunity to shine. Have your press kit ready again and be ready to explain your services and, more importantly, how your services will benefit them, in detail. Too often, a trainer will fall into the trap of explaining their services from the trainer's point of view. This usually won't work.

Think about it - the health care provider is not really interested in the great services you offer! What matters to them is how your services will benefit their practice. Be prepared to talk about this and be prepared to be specific. The critical issues here are how your services will enhance their standard of patient care and **how your services will save them money or make them money.** (“EIM: Health and fitness professionals’ action guide”, n.d., emphasis mine)

As seen in this example, fitness specialists are encouraged to highlight not only how their services will enhance patient care, but also the financial benefits. Further, the majority of the Action Guide is focused on how exercise specialists can act as entrepreneurs to find, and maintain, a client base, thus ensuring they (and their employer) can make money.

While the economic benefits of EIM is reiterated frequently throughout the website, the human element, or the way in which EIM can improve the lives of people

with chronic conditions, is less prevalent. The most explicit example of this humanization is in a video focused on the Claremont Club. The Claremont Club is a for-profit fitness facility that teamed up with private donors and local hospitals to create subsidized physical activity programming for people with chronic conditions such as breast cancer and spinal cord injuries. In the 30-minute video available on the EIM website (“EIM Network” section), participants spoke to the impact that such programming had in their lives. Another example of where the positive impact that physical activity had on people’s lives was reiterated was in the monthly “EIM Advocate” newsletters, which featured a testimonial section. (Though patient or consumer testimonials were not included in every newsletter.)

To be clear, I am not suggesting that EIM is heartless or devoid of attention to the people that it is trying to help. What I am arguing is that, when reviewing the EIM website, the human element is lost in the (neoliberal) over-emphasis on cost saving measures, entrepreneurialism, and marketing. This disproportionate focus on economics and professional development de-centers the main focus of the initiative. It can make it seem as though saving money, making money, or advancing one’s career is equally, if not more so, important as improving the lives of people. Interestingly, some sports medicine scholars who advocate for EIM, or EIM-type initiatives, do focus on or acknowledge the lived experience of chronic conditions, and the needs for healthcare providers and exercise professionals to act empathetically, placing patients first, and developing multi-systemic interventions that meet people where they are. Matheson and colleagues (2013), for instance, argued that in order to help people with chronic diseases become more physically active, sports medicine researchers and

practitioners must advance beyond short-term, top-down interventions, and, instead, meet people where they are. They advocated for human-centered programming (e.g., “community-based prevention centers”; Matheson et al., 2013, p. 1008) that can help people become—and stay—physically active (see also, Matheson, Witteman, & Mochar, 2015).³⁷ At this time, however, their work does not appear to be included on the EIM website.

Of course, showing that EIM (may be) cost effective need not be eliminated, and as will be discussed below, is inevitable in this current political climate. I do suggest, however, that there should be less focus on economics, and more on how exercise can—and has—improved people’s lives. Incorporating individuals’ voices in the EIM materials—including those with mental illness—can be a powerful way to convey how physical activity may be impacting the lives of those the initiative seeks to help. I know I was personally touched when reading an evaluation of the “On the Move” program—a community-based exercise program for people with severe mental illness (Hoffmann et al., 2015). The authors quoted a participant who, when recalling what she enjoyed about the program, replied: “The fact that a highly-trained individual would spend time with mentally ill people” (p. 218). Her words spoke volumes not only about the positive impact physical activity and skilled exercise specialists can have in the lives of their clients, but the pain, suffering, and unworthiness that are all too often experienced by oppressed populations. Why *shouldn’t* highly educated professionals—or anybody for that matter—be willing to spend their time with another human being? Through the participant’s words, we can learn about the impact of physical activity, the human condition, and the larger

sociocultural changes that need to take place in order to create a more equitable and just world.

EIM researchers and staff could help to promote individuals' experiences in myriad ways. For one, they could ensure each EIM Advocate newsletter has a testimonial from somebody with a chronic condition who has benefited from EIM. Ideally, a range of chronic conditions would be represented, with adequate attention to mental illnesses. They could also form a section of the website focused explicitly on such testimonials. This may include not only textual accounts of the impact that physical activity had in one's life, but videos, photos, and other modes of storytelling as well.

Digital storytelling (Lambert, 2013, Gubrium & Difulvio, 2011; Gubrium, Hill, & Flicker, 2014) and Photovoice (Carlson, Engebretson, & Chamberlain, 2006; Wang & Burris, 1997) may be particularly useful methods for showcasing the experiences of EIM consumers. Both digital storytelling and Photovoice are participatory methods used for research and program development. Participants are provided with the opportunity to tell, and reflect on, their stories about a particular experience or topic through self-generated video or photographs, respectively. This provides participants with the development of new skills (e.g., video editing, photo taking), and gives them control over how their stories are represented. It allows provides them with an opportunity to contextualize their lives, potentially identifying the ways in which social injustices contribute to their experiences (Carlson, Engebretson, & Chamberlain, 2006; Gubrium et al., 2014). In addition, the videos or photos are then shared with stakeholders—for example, policy makers or healthcare

providers— in an effort to effect change (Gubrium et al., 2014; Thompson et al., 2008; Wang & Burris, 1997).

These methods have been found to be a useful way for individuals with mental illness to share information about their lives, and (potentially) inform stakeholders, such as healthcare providers (Cabassa et al., 2013; De Vecchi, Kenny, Dickson-Swift, & Kidd, 2016; Thompson et al., 2008). Using such methods with EIM recipients who have mental health issues could therefore be a tool that allows participants to reflect on and communicate their stories. As people with mental illness often feel misunderstood or invisible, or isolated (Davidson et al., 2006; Thompson et al., 2008), this could be a powerful opportunity to help them feel more fully seen, appreciated, and integrated into society. If participants are comfortable with their narratives being included on the EIM website, it could be a way to inform and educate EIM healthcare providers, exercise specialists, and the lay public (De Vecchi et al., 2016). This may help to challenge some of the misinformation related to mental illness, such as the idea that one can be cured, or easily and quickly recover (see, for example, Cabassa et al., 2013; LaMarre & Rice, 2016). It also has the potential to draw attention to the ways in which social determinants of health (e.g., stigma, income, time, lack of community resources), and symptoms of mental illness (e.g., fatigue, hallucinations, weight gain due to medication), can create formidable barriers to being physically active (Cabassa et al., 2013; Crone, 2007; Hodgson, McCulloch, & Fox, 2011).

Relatedly, it is also important that recipients of EIM programming be included in the design and evaluation of physical activity initiatives. Failing to include

participants' input creates a top-down approach to care in which healthcare and fitness specialists are deemed to be experts whose advice participants must obediently follow (Matheson, Witteman, & Mochar, 2015). This perpetuates a power imbalance and further marginalizes such individuals. It also leads to less effective programming as the unique needs of participants is not taken into account (Matheson et al., 2015). Instead, and in line with community-based participatory approaches to research, (which include, but are not limited to the aforementioned digital storytelling and Photovoice), participants' must be involved as valued co-collaborators in the design and evaluation of EIM programming (Frisby, Crawford, & Dorer, 1997). This highlights the need for EIM to be a transdisciplinary initiative that includes the input of scholars, practitioners, advocates and community members or consumers who bring to EIM a variety of perspectives and theoretical and methodological proclivities (Kay, 2016).

Conclusion

The EIM initiative, with its mission to help make physical activity a standard part of holistic healthcare, has the potential to increase access to physical activity for marginalized populations, such as people with mental illness. In reviewing the website (January-February 2017 and October 2017), it is promising to see that mental health issues such as anxiety and depression were acknowledged; however, it is clear that more attention to mental illness is needed in the form of resources for healthcare providers, exercise professionals, and even the lay public. In addition, despite some attention to creating meso-level changes that may facilitate physical activity programming for people with chronic conditions (e.g., the aforementioned Claremont

Club example), there remains a dearth of substantive content focused on social determinants of health and the structural level changes that need to take place in order to make physical activity accessible to people with mental illness. For instance, incorporating programming for people with particular chronic diseases into a for-profit fitness club—as seen in the Claremont Club example—does not address barriers such as time, transportation, or in some cases, cost. (It is also unclear to what extent childcare is provided.) Additionally, as previously mentioned, fitness clubs can be a turn-off for many people, especially those with mental health issues who feel self-conscious or stigmatized in various ways (McDevitt et al., 2006; McDevitt et al., 2005; Raine, Truman, & Southerst, 2002; Soundy, Faulkner, & Taylor, 2007). With that said, while examples like the Claremont Club are a step in the right direction, ultimately, EIM needs to do more to advocate for more substantial structural changes.

It is not surprising that EIM does not focus more attention on such macro-level factors. As noted in Chapter 4 initiative such as EIM can be seen to be responding to, as well as reproducing, the healthist, neoliberal moment in which the focus on individual behavior change is promoted as a viable solution to complex problems that are the result of much more than one's (potential) inactivity (Crawford, 1980, 2006; Ingham, 1985). As Ingham (1985) explained, in the years following World War II, taking care of working class laborers was seen as central to the goals of capitalist production. As such, workers were paid a living wage, and a strong, supportive Welfare State helped to provide basic services in the form of healthcare, education, housing subsidies, and other health-enhancing resources. This collectivist mentality changed in the 1970s when the economy experienced a recession.

Collectivism was replaced with a renewed focus on individualism. The state would not provide the means through which to get basic needs met. Instead, it was up to individuals to adopt a lifestyle characterized by hard work, self-restraint, and consumption (which would create a viable economy) that would ensure their success and wellbeing (Ingham, 1985). Public health initiatives began to follow this neoliberal logic.³⁸ Instead of creating conditions in which all members of society could be healthy and thrive, individuals' risky behaviors, such as smoking, drug and alcohol consumptions, unprotected sex, unhealthy diets, and physical inactivity, were targeted as the problem in need of remedying (Lupton, 1995). Public health interventions increasingly began to focus on imploring individuals to manage their health risks by following expert advice and making necessary lifestyle changes (Baum & Fisher, 2014). Although such lifestyle interventions have been found to be relatively ineffective, they prevail as neoliberalism as an economic, political, and ideological form of governance remains intact (Baum & Fisher, 2014).

In that way, EIM's attention to cost effectiveness and entrepreneurialism, as well as its ties to the fitness industry and corporate sponsors, is in line with such neoliberal logic that pervades public health initiatives (De Lyon, Neville, & Armour, 2016).³⁹ EIM does not disrupt the status quo by pressuring the government to spend money or enact legislation that would upset major corporations (such is the case with public health efforts aimed at smoking cessation; Malcolm, 2016). Instead, through its partnerships with corporations, focus on lifestyle changes, lack of attention to structural determinants of health (e.g., Kay, 2016), and encouragement of an entrepreneurial ethos, it actively benefits the multibillion dollar fitness industry (De

Lyon et al., 2016; Neville, 2014; Maguire, 2001). As noted in Chapter 4, this can be seen as a way to help sports medicine physicians, kinesiologists, and exercise specialists gain legitimacy and prestige.

This is not to suggest that EIM is a futile effort, or that a total economic and political revolution is needed in order to create effective change or improve the health of people with mental illness and other chronic conditions.⁴⁰ However, it is important to be aware of how the current neoliberal climate in America (and globally) affects, and is in turn affected by, public health initiatives such as EIM. If mental health inequities are to be adequately addressed, there needs to be more sustained attention to social determinants of health.

Chapter 6: The Exercise Experiences of Women with Obsessive-Compulsive Disorder

Obsessive-Compulsive Disorder and Physical Activity Overview

In the final empirical chapter, I now turn to a discussion of the lived experience of mental illness and physical activity. I focus specifically on the exercise experiences of women with Obsessive-Compulsive Disorder (OCD). OCD affects between 1-3% of the population (Kessler et al., 2005; Ruscio, Stein, Chiu, Kessler, 2010). It is characterized by unwanted, intrusive obsessions that often prompt one to engage in compulsive behavior in an attempt to mitigate the obsessions. For people with OCD, the content of the obsessions is particularly distressing and is often—though not always—related to behaviors or outcomes considered to be immoral, harmful, or socially unacceptable (as dictated by a particular culture). Cross-nationally, the most prevalent obsessions can be categorized as fear of contamination, causing harm to others, impurity in thought or action (scrupulosity), the need for symmetry, or somatic-related concerns (e.g., fear that there is something wrong with one's body; Matsunaga & Seedat, 2007). Compulsive behavior often corresponds with a given obsession, and may take the form of repetitive checking (e.g., checking the stove, turning one's car around to ensure s/he did not hit a pedestrian), washing, touching, verbalization (e.g., repeating phrases or praying), reassurance seeking from others, or (inaudible) obsessive thinking and ruminating (Worden & Tolin, 2014). High levels of perfectionism, an elevated sense of responsibility, an inability to tolerate uncertainty, and the tendency to overestimate the severity of a situation, fuel the obsessive and compulsive thoughts and behaviors (Worden & Tolin, 2014).

Although once classified as an anxiety disorder, the latest version of the Diagnostic and Statistical Manual (DSM-5) includes OCD in its own category: Obsessive Compulsive and Related Disorders. This includes OCD, as well as other disorders that share similar symptoms (e.g., obsessions, compulsions, or high levels of impulsivity) or etiology (Ameringen, Patterson, & Simpson, 2014). In addition to OCD, related disorders include trichotillomania (compulsive hair-pulling), body dysmorphic disorder, excoriation (skin-picking), and hoarding (Ameringen, Patterson, & Simpson, 2014). The inclusion or exclusion of particular disorders in the obsessive-compulsive spectrum, however, is not clear-cut. Some scholars, for instance, view eating disorders such as anorexia nervosa, impulse control disorders (e.g., kleptomania), and neurological disorders, such as Tourette's Syndrome as being part of the obsessive-compulsive spectrum (e.g., Hollander, Braun, & Simone, 2008).

OCD and related disorders can substantially impact one's quality of life. People with more moderate to severe forms of OCD have been found to have difficulty sustaining jobs, pursuing education, engaging in meaningful leisure, and maintaining relationships (platonic, romantic/sexual, and familial) (Eisen et al., 2006; Fennell & Liberato, 2007; Murphy & Perera-Delcourt, 2014). In addition, such individuals may experience feelings of guilt, shame, and low self-esteem. This is often related to the content of the obsessions (which can be shameful and stigmatizing), one's inability to stop the compulsive behavior (which may be a source of embarrassment or ostracize the individual), or the way OCD impacts one's life goals or trajectory (Fennell & Liberato, 2007; Murphy & Perera-Delcourt, 2014). For some, OCD is so distressing that it results in suicidal thoughts or attempts. In a recent

meta-synthesis of the literature, and colleagues (2015) found substantially higher rates of suicidal ideation and attempts among people with OCD compared to the general population (Angelakis, Gooding, Tarrier, & Panagioti, 2015).

Despite the seriousness of the illness, and the extreme distress it can cause sufferers, OCD is often treated as a joke or trivialized by the lay public and in the media and commercial marketplace (Cefalu, 2009). One need not look far to find a plethora of products using the acronym OCD to stand in for things such as “Obsessive Christmas Disorder”, or “Obsessive Chocolate Disorder” (e.g., Rhodan, 2015). Relatedly, the terms OCD has become a (misguided) colloquialism to refer to personality traits or quirks characterized by perfectionism or attention to detail (e.g., “I’m so OCD, I like my shoes organized by color”). Such trivializing uses of OCD also pervade mainstream and social media. Fennell and Boyd (2014), for instance, noted that while many popular media representations portray characters with OCD as being multidimensional, capable adults, they can simultaneously perpetuate stereotypical or overly simplified understandings of the complexity of OCD and the distress it can cause people. This can be seen to contribute to it being treated as a “joke” illness (Fennell & Boyd, 2014). As discussed by Pavelko and Myrick (2015), such trivialization can also be found on social media sites or platforms, such as Twitter. Such portrayals and messaging undermine the way in which OCD can significantly affect one’s quality of life.

Similar to other mental illnesses, there has been increased attention to the role that physical activity may play in helping to treat OCD.⁴¹ As previously mentioned in the literature review (see Chapter 2), researchers have found (preliminary) evidence

that suggests exercise can help to reduce obsessions and compulsions (Abrantes et al., 2009; Brown, 2007), as well as generalized anxiety and negative moods (Abrantes et al., 2009) either on its own, or in conjunction with cognitive behavioral therapy (Rector et al., 2015). However, compared to other mental illnesses (e.g., depression), there is a remarkable dearth of research on physical activity and OCD. Additionally, the research that does focus on exercise and OCD tends to approach it from physiological, quantitative perspective. While this yields important data, the complexity of the exercise experiences of people living with OCD remains unknown. Given the close relationship between OCD, exercise addiction and eating disorders outlined in the literature review (see Chapter 2), it is particularly important to better understand how this population experiences physical activity

I am also interested in exploring to what extent the dominant discourses related to physical activity and mental health identified in Chapter 4 seem to be taken up, or resisted, in the participants' accounts of their experience. This furthers the contextualization of the exercise is medicine moment. As noted in Chapters 2 and 3, a particular phenomena does not come about in a purely top-down fashion, imposed by politicians or institutions, and unquestionably adopted by the masses (Andrews, 2002; Hall, 1986). Instead, such forms of culture are resisted or incorporated into individual's subjectivities to varying degrees. This, in turn, dialectically shapes the phenomena at hand, and the context as a whole. In what follows, I report on the results of the interviews I conducted with 14 women who self-identified as having OCD. The analysis focuses specifically on their experiences with physical activity.

Results

The participants' narratives related to the role of physical activity in their lives was compellingly nuanced. They simultaneously spoke to the beneficial aspects of physical activity—as a coping mechanism, as well as a general leisure pursuit or source of identity—as well as its limited effectiveness in helping them recover from OCD and other health issues. Some participants seemed to face formidable barriers to being active, while others reported psychological or physical harm that came from the intersection of their OCD and other mental health issues (e.g., anorexia nervosa). Most, if not all, of the participants seemed to believe that physical activity was meaningful, yet some indicated that their inability to be physically active in particular ways led to a sense of loss or feeling like a failure. In order to capture the complexity of their stories, I identified three themes: 1) Beliefs and Benefits: Not Just about Endorphins; 2) Embodied Limitations; and 3) Physical Activity Loaded with Meaning: Loss and Failure. In what follows, I report on the three themes, and various sub-themes, followed by a discussion of the results.

Beliefs and benefits: Not just about endorphins. Participants reported receiving myriad benefits from physical activity. It served as a source of enjoyment or leisure, a core part of one's identity, or a valuable coping mechanism, among other things. Participants' relationship to physical activity could be seen to be influenced by the intersection of dominant messages related to physical activity that they received through the media, academic sources, family, and friends, as well as their actual engagement in physical cultural practices.

Physical activity messages. It was clear from the interviews that participants have received the dominant messages related to the health-enhancing benefits of physical activity. This came up at various points in the interviews, particularly when participants were asked about their conceptualizations of health. As Valerie succinctly summarized, “...pretty much any kind of health anything, anywhere you might read nowadays you can see, exercise, exercise”. Speaking to the pervasiveness of such messages, Melissa said “...in the US the, the mantra that I hear all the time is ‘eat less, move more’, so, that’s, I mean, I think that would, that would make most people, uh, more healthy than they currently are.”

The participants also spoke to messages related specifically to mental health benefits of physical activity. As Amanda explained, “That’s the big one you hear, when people give like, like talks about depression or stuff, they’ll be like ‘and exercise as proven to be very effective’...and you’re like, well, sort of.” When speaking about the potential link between mental health and physical activity, participants frequently cited the (supposed) role of endorphins in creating anti-depressive effects. When asked what it was about dancing that made her feel better, Callie responded: “And then, plus, don’t they say that, uh, like, exercise releases endorphins?” When asked what she would think if her psychiatrist prescribed exercise, Trish, in a similar vein, noted: *Um, I mean, I agree with it. I know that there’s lots of studies done that just show how, you know, the endorphins—and, uh, exercise, I mean I, I would agree with that.*

The above quotes suggest that some of the dominant messages related to physical activity and (mental) health (identified in Chapter 4) have been heard and, to

varying degrees, internalized by participants. Importantly, however, some of the participants acknowledged uncertainty related to the messages they were receiving. Laura, for instance, articulated the relationship between mental and physical health as it relates to exercise noting: *“I mean that just—that seems like it’s the common denominator to everything, like if you exercise then you’re, then you’re physical healthy and you need to be physically healthy to be mentally healthy.”* However, she went on to admit that she is not certain on the veracity of such messages, stating *“And I don’t know how accurate that is, but I’ve just heard that repeated over and over again.”*

Embodied benefits. While all participants clearly were aware of the importance of physical activity as part of a healthy lifestyle and key strategy in preventing a range of chronic illnesses, their beliefs about the benefits of physical activity moved beyond this basic public health message. More specifically, and as will be illustrated in what follows, all of the participants indicated that they had personally experienced a variety of benefits from being active. These included increased energy, confidence, improved body image, a feeling of productivity, and a sense of enjoyment or pleasure. Moreover, physical activity helped them to better manage their OCD and other mental health issues such as stress/anxiety, depression, bipolar disorder, and eating disorders such as binge eating and anorexia nervosa.

Overall, two key elements were identified within participant narratives as contributing to the benefits of physical activity: its role as a distraction, or respite from obsessions and compulsions, and its holistic nature, which facilitated well-being

beyond simply symptom reduction. The examples that follow illustrate these sub-themes, and expand upon the benefits of physical activity outlined above.

Distraction or respite. In line with the literature on mental illness and physical activity, one of the frequently mentioned benefits of physical activity was its role as something that distracted participants from their obsessions and compulsions, or offered them a momentary reprieve from their distress (e.g., Caddick, Smith, & Phoenix, 2015). As noted by Sara, an avid runner, when she was running she could not engage in her compulsive behavior (skin picking and eating): *“Umm, for me the physical activity is mainly running and it is great because when I’m running I can’t be eating and it’s hard for me to pick my fingers... So at least for that time that I am running, I, I, you know, problem’s managed, it’s good.”* Similarly, Xena explained that exercise is but one of a variety of activities that can take her mind off of her obsessions, stating:

Yeah, taking myself away from, anything that can get me out of what I’m obsessing about helps. So taking a walk helps. Medit—if I go into a room and meditate that helps. Um, sometimes I’ll just like turn on the TV, um, to a show that I really like.

Physical activity, in this way, can be seen as something that refocuses attention away from the obsessions and compulsions that infiltrate participants’ thoughts. For Jill, martial arts not only redirects her attention, but contributes to a state of flow (Csikszentmihalyi, 1990), or a state in which complete immersion in an activity contributes to feelings of creativity, joy, and fulfillment. She described this as follows:

Are you familiar with the idea of flow?...Yeah, the, the idea that there's something that you're doing um, that, like everything else just kinda disappears, you're, you're very in that moment, you're not thinking about anything else, like that's what you're doing, and to have something like that in your life just changes your life.

It is important to highlight the transformative impact that physical activity has on her life. For Jill, and other participants, physical activity not only provided a distraction or respite, but had a substantial overall impact on their lives: It was meaningful, if not lifechanging. In the next section, this idea that physical activity can play a central role in participants' lives will be explored further.

Holistic activity, holistic well-being. The subjective sense of well-being experienced through physical activity was echoed by many of the participants. It became clear that they seemed to view physical activity as holistic in nature, providing benefits that are simultaneously biological, psychological, and social. As an example, when asked about her thoughts on prescribing exercise to address mental health issues, Jill enthusiastically exclaimed that “*I think it's just the most holistic, uh, treatment that exists.*” She noted that while the physiological aspects play a role, physical activity—sport, in particular—can be helpful as it provides “confidence”, “purpose”, and social support. When describing her exercise experiences, Amanda also noted that “*I do feel, like, the endorphins*”, though when describing her experiences in mental health treatment facilities she went on to explain that the benefits of physical activity went beyond the (supposed) role of endorphins, but included psychosocial aspects as well:

And you could exercise, and you know, it wasn't like rigorous exercise. You know, they had like treadmills and stuff, but like, you could hula hoop, like, their intent was just for you to like, just be active... And I think, um, it was a good, just um, they took into account that some people really don't like exercising, so when you walked around the campus, and this was in the summer time, like, it felt more social, and more like, you could finally talk to someone about like how you're feeling, or like, you could make friends that way. So I think they did a good job of realizing that, it's not- like a lot of people say, endorphins, exercise... like that's good, but like, exercising when like, t-to help a mental illness isn't just about like the endorphins, it's like, everything else that comes with it.

Amanda's description of developing an appreciation of physical activity while in treatment centers highlights the important role physical activity can play in allowing for meaningful social engagement and support.

Some of the participants emphasized how certain types of physical activity allow for particularly meaningful experiences as multiple senses are engaged and one is able to connect with the natural environment and animals. Callie explained that for her, one of the most enjoyable physical activities in which she engages is walking her sister's dog outside while listening to music and taking in the scenery: "*So I like there was the cute dog, we were outside walking, pretty nice sky, and like airplanes. So some of my favorite things all together. And if I was listening to music, then it was, you know, intensified. So that was always awesome.*" The auditory stimulation from her music combined with the pleasant visual stimuli and satisfaction she receives

from walking a dog made for an enjoyable experience. Trish also found walking dogs to be particularly beneficial: *“Um, well, I know that combining the two [exercise and animals] helps. Um, in so many levels. It helps motivate me to keep going, ‘cause it’s good for the animal. And then the animal, it being good for the animal, also makes me happy. And then endorphins are being, you know, it’s just like, all these accumulated and it’s really, um, rewarding.”* Brianne similarly highlighted the benefits of sensory stimulation through the combination of music and being outdoors, noting, *“Yeah, it’s a very, it’s a very like all your senses are like, you know, I mean especially if you’re running with music or whatever.”* For these participants, the benefits derived from physical activity were inextricably related to the context in which the activity was situated.

Importantly, and as explicated by some of the aforementioned quotes, this more holistic view seemed to mean that physical activity did not have to take the form of vigorous exercise in order to “count” as a meaningful or health-enhancing. In Amanda’s case, she described herself as not liking physical activity, yet when it was introduced to her at her treatment centers as something that could include simply walking with friends, or engaging in playful activities like hula hooping, she seemed less opposed to being active. The centers taught her to *“...[be] able to accept that like, you don’t have to like, run a mile to e-exercise. Like, exercising would just mean like not sitting in one place, worrying about what you’re doing.”* Brianne, who in addition to OCD, struggled with an eating disorder and bipolar disorder, and was “addicted” to exercise at one point (e.g., running), similarly described her journey to

re-conceptualize physical activity as including, *“less rigorous, intensive kind of forms of exercise that are still stress relieving”*, such as yoga, walking, and tai chi.

Embodied limitations. While participants cited the benefits of physical activity as a coping mechanism or, more holistically, something that contributed to well-being, there were limits to the extent to which it provided them with benefits. Participants agreed that exercise was not a cure for their OCD or related illnesses. Jill explained that *“...some disorders, like OCD, bipolar disorder, schizophrenia, they don’t have a cure, you just manage them...exercise is a good alleviator, but I can’t call it a cure.”* Brianne expressed frustration at discourses that suggests exercise and other lifestyle approaches to mental illness can be enough on their own. She had a college professor endorse this type of message, to which she replied: *“And, uh, I was like, ‘No, it’s not just eat healthy and exercise and mental health is good.’ That’s like for the average person, but that’s not enough for like people with severe like conditions or whatever.”* She distinguished between the “average” person and someone with a mental illness, indicating that lifestyle approaches like eating well and exercising may help those without mental illness manage their stress and enhance their overall wellness, but for people with more severe forms of distress, diet and exercise may not be enough in and of itself. Amanda echoed Brianne’s sentiments, stating: *“I wouldn’t say that exercise could be taking the place of any kind of therapy or, or...medication. Um, because people have suggested that to me.”* Similarly, Claire explained that while physical activity reduced her anxiety levels, it did not completely eliminate it: *“Um, well, I’ve always enjoyed running and, um, that’s been sort of a good way to get rid of some of the adrenaline of anxiety and, um, panic attacks and it*

hasn't, um, really been as effective as I think some other people get from it in terms of making their anxiety go away, but, um, it helps..." Claire went on to explain that for some of her friends and acquaintances (presumably, those without mental illness), physical activity seemed to eliminate their stress or anxiety, while for her, it was helpful, but her anxiety persisted. In what follows, I expand on some of the limits to physical activity's therapeutic potential, discussing three subthemes that I identified in the interview data: The inability to stop obsessions and compulsions; the presence of exercise compulsions and addictions; and OCD-related barriers.

Inability to stop obsessions or compulsions. One of the shortcomings of physical activity as a coping mechanism can be seen to be related to its inability to change thought patterns or completely stop obsessions and compulsions and related anxiety. Abbie, for example, explained that *"I have not found it [physical activity] particularly effective for directly addressing my anxiety and my obsessive thoughts...Because, um, because it's just one piece of it. Like, um, because obsessions—the obsessions are thought-based, they need to be addressed by thoughts..."* Abbie views her obsessions as being cognitive in nature and must, therefore, be targeted with (at least some) cognitive strategies. For other participants, while exercise may be a way to get their mind off of their obsessions and compulsions, such benefits are frequently short lived. Trish found that exercising provided her with stress relief in the form of feeling productive, as though she accomplished something difficult and could, therefore, complete other challenging tasks. However, she went on to explain that *"...when I sit down [to do school work] I'm still feeling...that feeling of stress-free could completely go out the window."*

Sara's experience is another good example of the limitations of physical activity in helping manage obsessions and compulsions. Sara described herself as having food-related obsessions. She spends large quantities of her time thinking about, obtaining, and consuming food. As previously discussed, she found running to be a core part of her identity, as well as a great distraction from these obsessions and compulsions as she could not consume food while active. However, returning from exercise re-activates her cycle of searching for, and eating food. She described it as follows: "*Uhh, you know, I usually feel pretty good after I've run, but I'm also pretty hungry after I've run, and so I usually go looking for food, pretty much as soon as I'm done running. And, um, once I start it's hard to stop.*" Sara reported that this food cycle would commence post-run. So while physical activity was immensely meaningful and provided her with numerous benefits, at the same time, it simultaneously alleviated and exacerbated her food-related obsessions and compulsions.

Exercise compulsions or addictions. For some of the participants with food-related obsessions or compulsions, or eating disorders, the role of physical activity in their lives was particularly complicated. Brianne, for example, had OCD as well as bipolar disorder and anorexia. She was a competitive cross-country runner in high school, and developed an eating disorder (in part) in an attempt to lose weight so that she could be more competitive. She described her experience as follows:

...I was seriously addicted to exercise. It's been very difficult to get a healthy relationship. Like I couldn't go a day without running, I would just like go crazy. And like when you're running, you're thinking about the next run and,

the next run. Or, and how many calories is this burning versus how many did I take in?

Her addiction with exercise led her to sprain her ankle as she continued to run on it despite developing tendonitis. Being unable to continue running on a sprained ankle, she then began purging her food as a way to guard against gaining weight. She explained that purging in the form of vomiting was taking the place of purging through exercise: *“Cause like, you know, running is kind like a purging thing, too, with the calories, so.”* Through the years, Brianne has learned how to become more “mindful” with regard to her physical activity practices. She explained that *“My whole thing with exercise, it comes down to mindfulness. Like you really have to be mindful. Like if you have a history like I do, why are you running?...Am I doing this to burn calories or am I doing this because of like physical and mental health...?”*

Brianne’s relationship with exercise can be seen as compulsive, or potentially a form of secondary exercise addiction in which individuals with eating disorders excessively exercise as a way to manage their weight. She spoke to the connection between her OCD and eating disorder, noting: *“But, um, that’s why in a way my eating disorder is a manifestation of my OCD—like it all reverts back to the OCD.”*

In that way, Brianne saw her OCD and eating disorder as inextricably connected.

Sara and Jill’s stories also serve to underscore the complicated relationship between physical activity (competitive sport), eating, body image, and OCD symptomology. Sara and Jill disclosed that they had eating disorders—anorexia, and anorexia and bulimia, respectively-- when they were teenagers. Sara, at the time, did not view her restricted eating as a problem, but a way to be in top shape for basketball

(similar to Brianne's reasons for weight loss). Both Sara and Jill reported complying with treatment for their eating disorders in order to be able to get back to playing sports. While athletics could be seen to be part of the reason for developing an eating disorder (for Sara and Brianne)—though not the underlying trigger as Sara and Jill, looking back, both noted that it had to do with issues of control and a response to their family environments—it also was the motivation for gaining weight.

Interestingly, Sara explained that when she went to college and was competing in cross-country, she gained weight (“bulked up”) due to the weight training she had to undergo. This made her uncomfortable, but she felt like she was in good shape and performing well in practice, so she tolerated her changing appearance and physicality. However, she had major performance anxiety and would choke at every cross-country meet. This made her feel badly about herself, and so she would “*attack [herself] physically and mentally*” through her skin picking and food consumption. It was a cycle that went on until her junior year when she quit the team. At the time of the interview, she still had her food obsessions, though they are now fueled by different anxieties (e.g., grad school). For Sara, weight-gain was tolerable only insofar as it helped with her performance. When she was unable to perform, she used food, as well as skin picking, to punish herself and mitigate her anxiety. This further illustrates the complex relationship between physical activity (sport), weight, and OCD.

Laura, in a similar vein, had food obsessions and also attempted to control her weight through rigid physical activity routines. As an undergraduate, when her obsessions were at their peak, she would engage in the same workout every day,

consisting of 30 minutes on the bike and 30 minutes on the elliptical (and occasional figure skating). Feelings of guilt and anxiety would arise if she did not complete her routine. For her, some of the main benefits of physical activity were derived from the meaning that she ascribed to it. She explained that *“It gives me this huge sense of relief. Like I’m doing something really healthy, I feel really, really good about myself. Not while I’m exercising, but after I’m done.”* In addition, her obsessions temporarily subsided after being physically active. She has an obsession with food in which she was constantly eating, or wanting to eat. At the same time, she was unhappy with her body image, always desiring to lose weight. She described a voice in her head that would repeat *“I wanna eat, I wanna eat, I wanna eat”*, which then led to *“I should workout, I should workout, I should workout.”* When she did workout, the obsessive thoughts related to food and exercise were reduced. For Laura, the benefits of physical activity seemed to be primarily tied up in healthist ideologies related to the morality associated with exercise, in addition to its potential for weight loss. Xena similarly described becoming obsessive about exercise. She reported:

...But I also kind of have an obsessive relationship with exercise where it’s like a part of the routine that I have to do to feel in control... so it’s easy for things for me to escalate from being like part of my routine that makes me feel good to like, things that have to happen, um, and exercise writes that line for me.

Interestingly, though Xena did not mention having an eating disorder or food-related obsessions, she indicated that if she did not engage in her exercise routine, she would feel *“like out of control, um, like I’m not--like taking care of myself, um, that I’m*

gonna gain weight.” This highlights the pervasiveness of weight-related concerns among women—especially as they intersect with their physical activity/exercise understandings and experiences, which will be explored in more detail in the discussion section.

For both Laura and Xena, physical activity was, at times, a compulsion—something that had to be done in order to feel okay about themselves, as opposed to something that was part of a nourishing, self-care routine. Their experiences, as well as Sara’s, Jill’s, and Brianne’s, illustrate the complexity of physical activity as a therapeutic. It is helpful, yet can also be a source of stress, if not physical or psychological harm, if it becomes an obsession or compulsion.

OCD-related barriers. For some participants, their obsessions or compulsions, as well as other mental health issues, presented barriers to engagement in particular physical activities. Swagata, for instance, described how her obsession (fear) of germs impeded her ability to play racquetball:

I went to play racquetball and, of course, every time you touch the ball you can’t help that. Every time I had to serve, I was like, um. I mean, it will come to my mind that ‘oh, someone touched the ball and it fell down now I’ll [inaudible] pick it up with my hand.’ Yeah, so. And the people get annoyed if I’m cleaning the ball all the time to play.

After years of engaging in mindfulness exercises and meditation, she noted that she is now better able to “*train [her] mind*” and get herself to engage in her compulsive behavior less (e.g., cleaning the ball every time she touches it), yet when she is

particularly stressed or overwhelmed, such coping mechanisms are difficult, if not impossible, to access.

Xena also noted that her anxiety related to places that appeared dirty or run-down made it difficult for her to run outside:

And when I first moved here my friend and I would try to go running outside, um, I would just, I would always end up with having a panic attack coming back, um, which, it was just like, new environment and there were a lot of stimuli outside. And the, like, entry-way to our apartment complex just always really bothered me 'cause it hadn't been cleaned in years, probably, and it smelled like cigarette smoke and I just hated coming after a run to that space—like that was such a trigger for me going through there, um, that I had to find another way to go running.

She noted that while running was beneficial in that it “*really gets [her] out of [her] head*” and seemed to re-orient her with her body, at the same time, the physical sensations combined with being extra sensitive to her environment exacerbated her anxiety. She explained this as follows: “*‘Cause I’m already, when I’m running I’m in, like heightened sensitivity to things, and so I can be that much more prone to getting upset by things. Like in some ways it helps because I get out of my head, um, but it heightens my sensitivity to things around me.*” As a way of reducing her anxiety, Xena has developed strategies such as running on a track, or indoors on a treadmill. In addition, if she is experiencing intense anxiety, she may choose to participate in a less physically intense activity, such as walking.

Similar to Xena, Jill also reported that her compulsion related to sidewalk blocks (i.e., having to walk an odd number of steps on each sidewalk block) made it impossible for her to run, despite wanting to train for a Tough Mudder. She, too, nearly experienced a panic attack when attempting to jog. She noted that *“Um, but when I tried [to run] uh, with the sidewalk, I just, I couldn’t do it, and I almost had like a panic attack”*.

Abbie, who was a skilled athlete and derived a lot of social benefits from participating in various sports, gave up her involvement in team sports as the anxiety related to a fear that she was giving off an unpleasant body odor became overwhelming. She explained: *“Um... so... when I started having the obsessional thoughts and the worries, um, I really pulled out of a lot of the athletic things because of that concern with sweating and, you know, how it was contributing to the problems”*

While many of the participants faced barriers to participating in particular physical activities due to their OCD, most were able to come up with strategies for mitigating some of the obstacles. However, not everybody was able to find effective ways to overcome such barriers. Valerie, for instance, experienced the most extreme barriers to exercise participation. In addition to OCD, Valerie struggled with bipolar disorder (with psychotic episodes), depression, fibromyalgia, and borderline personality disorder. She also described herself as being obese due to rapid weight gain brought about by her psychotropic medication (this is common with many psychopharmaceuticals; Robson & Gray, 2007). Her obsessions and compulsions took the form of fear of germs, scrupulosity (the need to be perfectly devout and pure

in spirit and behavior), completing tasks perfectly, and sexuality-related obsessions (e.g., intrusive sexual thoughts, uncertainty related to sexual orientation). Valerie's combination of mental and physical health issues created formidable barriers to her engagement in physical activity. Due to her fibromyalgia and obesity, many physical activities created intense pain while participating (e.g., joint pain due to excess weight), or following the activity (fibromyalgia). While she found water aerobics to be an enjoyable activity in which she could engage with minimal physical pain, her OCD symptoms made participation nearly impossible: She found the public pools to be "*creepy, germy, yuck*", referring to their potential uncleanness. She also found that being around women in various states of undress in the pool and locker room triggered her sexual obsessions. Even when she was feeling good physically, and able to participate in different types of physical activities that were less triggering (e.g., gym-based activities), her perfectionistic, "all-or-nothing" thinking made moderate physical activity nearly impossible. In a follow-up email, she explained:

I find it hard to go to the gym and just do a little bit. Sometimes my body is not feeling good because of my fibromyalgia, and even though logic says five minutes of exercise is better than none at all, it's wicked hard for me to act on that logic. I feel like I need to do lots of cardio, do all of the weight machines, and then stretch every single muscle in my body, or else the workout isn't "good" or "right." The result is that I'm often so overwhelmed that I end up doing nothing at all, not even a little. Then there's the problem of sweating, which is part of my cleanliness obsession I think. I HATE the feeling of sweating. I hate feeling less than squeaky-clean (literally) EVER. So engaging

in any activity which will cause me to sweat, and then be forced to thoroughly scrub every inch of my body, is unpleasant at the least, and often so anxiety-provoking that I avoid it completely.

For the aforementioned participants, it was a challenge to be physically active in the ways they desired, or at all.

Physical activity is loaded with meaning: Loss and failure. For many of the participants, the challenges they face in participating in desired physical activities—or *any* physical activity—due to their OCD can be seen to bring about feelings of sadness. As explained in what follows, these feelings are related to the meaning physical activity holds for them, but in differing ways: a) feelings of loss that what they enjoy or used to be able to do is no longer possible; and b) feelings of failure as they feel unable to live up to societal messages regarding the need for physical activity in order to be to be healthy or productive.

Loss. Far from a trivial activity, the participants highlighted its powerful role as a meaningful, at times, therapeutic, leisure pursuit, and, for some, vital component of their identity. The severity of loss ranged from temporary upset when unable to participate in a particular activity, to the feeling that their life was incomplete. Jill, for instance, who, as previously mentioned, was unable to run due to her OCD symptoms expressed such frustration, noting: *“At the time um, yeah, I was, I was pretty upset then. Um, that’s actually because I had wanted to do a Tough Mudder, um, but you know, if I can’t run, I can’t do a Tough Mudder really. Uh, so, I was pretty upset about that”*. As another example, Abbie, who planned to compete in athletics at the

college level and who believed she had a chance at making it to the Olympics, ended up not pursuing collegiate sport due, in part, to her obsessions and related anxiety.

Yeah, I mean, I used to be pretty competitive, a pretty competitive athlete, but I didn't – um, I stopped in high school. I didn't compete in college because of my concerns with sweating and all of that. I probably could have gone on a full scholarship athletically. I just-I couldn't deal with it. Really makes me sad because I-I don't-I don't feel sad anymore, at one point I was really sad about it. 'Cause I think I could've, um... one of the things I know my mom was hoping that I could've gone to the Olympics and competed at that level.

Both Jill and Abbie reported past feelings of sadness and upset, though they noted that they no longer feel the sense of loss anymore. Valerie, on the other hand, who struggles to participate in any form of physical activity, continues to feel as though her life is incomplete. When asked if her mental health issues prevent her from engaging in meaningful activities she explained: *“Um, and even things that are, you know, not a huge deal but like I used to take water aerobics and that was good for me and good for my fibromyalgia, but I quit because I was worried about germs.”*

Interestingly, Valerie prefaces her statement by saying that [water aerobics] is “not a huge deal”, but when asked how she feels about missing out on meaningful things in her life she noted that *“Um, it's, it's pretty upsetting, I really feel, like, kind of like, big holes in my life, like I'm missing out on a lot of stuff and it makes me feel really sad and kind of like grief.”* In this way, it seems physical activity is but one of a variety of activities and goals that participants like Valerie are unable to take part in or fulfill due to their mental health issues.

Failure. In addition to feeling grief or loss over not being able to engage in particular physical activities, some participants experienced self-judgement, or felt like they were failures in some way. Brianne, for instance, felt badly about herself for not being able to engage in running, which she really enjoyed, due to her mental health issues (eating disorder and OCD). When explaining what she was experiencing when she cut herself for the first time (i.e., self-harm), she noted: *“I just felt like a failure, really. In like all aspects of life and stuff. I don’t know, like running was a huge part of my identity, as well as part of my eating disorder and stuff.”* For Brianne, not being able to run was but one of a variety of ways in which she felt like she was not meeting a particular standard.

Amanda also felt badly about herself as messages she received from her mom and other sources suggested that exercise should be enough to make her feel significantly better. The messages, coupled with her experience of physical activity not eliminating her symptoms, left her feeling invalidated. She explained:

My mom was a big proponent of that [exercise versus medication or therapy]. And um, not only does it not, I-I feel that it didn’t really help me, but it kind of made me feel worse about myself, that people were saying like, ‘all you need to do is exercise,’ like, really? Like... not that I didn’t try everything, but... so, um, I have – I have mixed reviews about it.

She went on to explain that her mom, for instance, is well-meaning in that she doesn’t want there to be anything wrong with her. She wants her to be happy and healthy and so her quips about “try X” are an attempt to help her, and often based on her own experiences dealing with a lower grade of depression, though, ultimately,

they made Amanda feel worse about herself. As a coping strategy, she ended up not disclosing to her mom how she was feeling.

...but that is also reason why I think people keep quiet, because, you know, you're already fighting with your own self about like, your i-issues. And like, why can't I get over this. And then if someone else voices it, you're like, well great. [laughing] Like, now I'm not the only one who thinks it, and, like, that's how people think about me, so...

For Amanda, the messages she receives related to the purported benefits of physical activity do not fully resonate, and make her feel as though she is being judged.

Similarly, Valerie expressed the belief that healthcare providers (other than psychiatrists) do not have a good grasp of the challenges people with mental illness face in following lifestyle advice pertaining to diet, exercise, and other strategies and, like Amanda's mom, promote simplistic mental health-related messages. In a follow up email, she stated:

But sometimes I feel like doctors and other providers (especially those in internal/family medicine, as opposed to psychiatry) don't fully appreciate how difficult exercise (and other lifestyle "prescriptions" such as 'just eat healthy,' or 'just reduce stress,' or 'just lose weight') can be for people struggling with mental illness. NOTHING is ever "just that easy" when you're living with mental illness. For example, how can someone who is too depressed to get out of bed or brush their teeth possibly be expected to engage in any sort of meaningful exercise program?

Valerie and Amanda spoke to the need for healthcare providers, in particular, to be attuned to the needs of clients when prescribing exercise. As Amanda noted, a failure for providers to really listen to a client and have their best interest in mind can make someone feel worse about themselves: *“Don’t bullshit someone. If you know they’re depressed, and you’re prescribing them exercise, and it doesn’t work, they have less faith in you. They have less faith in themselves. Um, and it makes them feel worse.”*

The importance of knowing one’s client and tailoring treatment programs with their best interest in mind was raised by several participants. For many, when asked how they would feel if a healthcare provider prescribed exercise for their OCD, they explained that while they wouldn’t be opposed, they would want to know what specific exercises they should do—particularly as many were already quite active—and would want to try it on a *“take it as it comes”* basis where they check in frequently with the provider to see if physical activity is enough on its own, or if medication or other types of treatment may be needed. That said, most of the participants were on medication, and some expressed concern when asked how they would feel if the doctor first prescribed physical activity instead of therapy.

Discussion

To the best of my knowledge, this is the first study to examine the exercise experiences of women with OCD. In many respects, the participants’ experiences engaging in physical activity are similar to those of people with other mental health issues such as depression, eating disorders, post-traumatic stress disorder, bipolar disorder, and even schizophrenia in terms of the benefits and barriers to participation (Caddick et al., 2015; Mason & Holt, 2012; Moola, Gairdner, & Amara, 2015; Mura

et al., 2014). It was clear from the participants' narratives that, at times, physical activity played a significant role in their lives. For many of the women, physical activity seemed to be a core component of their wellness routine, and something that helped them to improve their mental and physical health, and mitigate the severity of their OCD-specific symptoms, or stress and anxiety more generally. Importantly, however, the benefits of physical activity went beyond reducing symptoms, but could be seen to contribute to a holistic sense of well-being and growth. This was exemplified by its role as a source of identity, self-esteem, and its provision of an opportunity to connect with other people, animals, or the natural environment. This is in line with other research focused on physical activity and mental illness. Researchers have found, for instance, that the benefits of physical activity are not limited to the physiological effects, but include psychological, social, and environmental components (e.g., Crone, Smith, & Gough, 2005; Fullagar, 2008a). Indeed, the importance of physical activity in the lives of the participants was illustrated by the feelings of loss and sadness that was described by some of the participants, most cogently by Valerie, when unable to engage in physical activity due to the symptoms of mental and physical illnesses.

While physical activity is clearly valuable for the participants, at the same time, its role in their lives was not without complications. For some participants, physical activity triggered or exacerbated symptoms of OCD and related disorders (e.g., panic attacks). They had to negotiate this by participating in activities that would be less stimulating or distressing, which sometimes meant giving up beloved forms of exercise. In this regard, their experiences are similar to those in Wright and

colleagues' (2012) study on the exercise experiences of people with bipolar disorder. Participants in their study described exercise as a "double-edged sword" (Wright, Armstrong, Taylor, & Dean, 2012, p. 638) as it could be beneficial, though had the potential to amplify manic episodes; therefore, it had to be carefully monitored and regulated.

Participants with food and weight related obsessions or compulsions, or eating disorders, had particularly complex relationships with physical activity. For some, physical activity was more of an obligation or something that had to be completed in order to feel a sense of relief or reduced anxiety. This is in line with Kolnes (2016) and Moola and colleagues' (2015) qualitative research on the exercise experiences of women with anorexia nervosa. Many of the participants in both studies similarly felt that physical activity was a compulsion, or something that they had little control over. Similarly, participants in the present study, such as Brianne and Xena, described themselves as being "addicted" or having an exercise "compulsion", respectively. For Brianne, this led to a series of physical and mental health problems such as injury from over-exercising, and self-induced vomiting when she could no longer purge her calories through exercise.

While the more extreme cases of food and weight-related obsessions and compulsions were highlighted in the results section, other participants also noted that their relationship with physical activity was marked by a desire to lose weight or achieve a particular appearance. Indeed, this is not surprising as women and girls continue to receive messages from a variety of institutions (e.g., the media, school, families), as well as the multibillion dollar fitness industry, that equate an

unrealistically thin and toned body with health, morality, and self-worth (Dworkin & Wachs, 2009; Hesse-Biber, 1996; Jette, 2006; Markula, 1995; Rich & Evans, 2005). This contributes to engagement in physical activity for appearance-based reasons, as opposed to doing it for enjoyment, or part of a fulfilling self-care routine. This is not a trivial point, as researchers have found that exercising in order to achieve a certain aesthetic can contribute to body image dissatisfaction and lower levels of self-esteem (Strelan, Mehaffey, & Tiggemann, 2003) found, women who exercised for appearance reasons.

Although the ways in which women's relationship with physical activity (and food) can lead to problems has been well-established in the literature, it continues to be a challenge in many women and girls' lives. In response to what many participants in this study saw as a culture that fosters unhealthy relationships with food, exercise, and one's body, some noted that better messaging related to physical activity is needed. Specifically, participants called for messages to promote the health-related benefits of physical activity as opposed to associating it with appearance. I would argue that such messages should be promoted not only through the media, but a variety of educational programming including, but not limited to, physical education courses in school, courses at community recreation centers, camps, and health-care settings, among others.

For some participants, being active was a formidable challenge. OCD and other forms of distress made it very difficult to consistently be active. While some had coping mechanisms or strategies that allowed them to participate in different, less anxiety-provoking forms of exercise, others had more difficulty doing so. This made

some of them feel sad, as they felt as though they may have missed opportunities (e.g., a chance to go to the Olympics, competing in Tough Mudders), while for others they felt badly about themselves, as though they should be able to rise above their mental health difficulties. Such suffering is evident in other parts of the participants' lives, as they disclosed feeling ashamed of the content of their obsessions or compulsions, hopeless when thinking about a future in which they continue to have such anxiety, or distressed when reflecting on missed opportunities or lost time and productivity. These feelings of guilt, shame, loss, and low self-esteem have been documented in the extant literature on OCD (e.g., Fennell & Liberato, 2007; Murphy & Perera-Delcourt, 2014). The results from this research suggests that one's (in)ability to participate in particular types of physical activity can be yet another area in which such feelings of sadness and judgment manifest.

What seemed to amplify such feelings of guilt, loss, frustration, sadness, and self-judgement is the exaggeration of just how effective exercise can be in producing significant mental health benefits, as well as misunderstandings related to how difficult it can be for people with mental health issues to be active. Indeed, physical activity is too often positioned as a "cure" or "miracle drug" (see Chapters 4 and 5), or something that is relatively easy to do if one tries hard enough. While physical activity was helpful in reducing the severity of participants' symptoms and improving their quality of life, it is important to highlight that it did not serve as a cure, and for some, the benefits of physical activity were particularly short lived. Instead, exercise was positioned as but one of many enjoyable leisure pursuits that had therapeutic benefits. Researchers such as Fullagar (2017) and Caddick, Smith, and Phoenix

(2015) similarly noted that physical activity was not a cure for their participants who experienced depression and PTSD respectively. As noted by Amanda, simplistic messages that promote the idea that physical activity can all but eliminate mental health problems make her feel worse about herself.

At the same time, as explained by Valerie, many healthcare providers—as well as the lay public—may not have a good grasp of just how difficult exercise can be for people with mental (and physical) health issues. Valerie’s sentiments are reflected by others with mental illness, as exemplified by the quote (previously cited in Chapter 4) by Bryony Gordon:

My therapist tells me that I should be trying to exercise as much as possible. I respond by telling her that is a really stupid thing to suggest to me. Telling a person with depression to get up and go for a run is like telling someone with alcoholism to skip the vodka and have some water instead. Because when you are in the grips of depression, you cannot move. (Gordon, 2016)

As reflected by Valerie’s all-or-nothing relationship with physical activity, even seemingly innocuous messages that encourage people to exercise for even just ten minutes a day, do not resonate with her. Connecting this back to Chapter 5, this stresses the need—through the Exercise is Medicine initiative and other public health efforts— to provide healthcare providers and exercise specialists with the resources and training required to understand the complexity of OCD and how it can affect individuals’ exercise experiences. Without such nuanced understanding and skills, well-meaning health professionals can inadvertently provide misguided advice to

people living with OCD, missing an otherwise important opportunity to help this population develop more sustainable and meaningful physical activity routines.

It is important to note that participants did cite numerous strategies or ways that they were able to navigate their desire to participate in physical activity while being constrained by obsessions and compulsions. From participating in less triggering activities or locations (e.g., walking vs. jogging; individual exercise vs. group classes), or engaging in careful reflection and mindfulness, participants demonstrated that they were resilient and insightful. Brianne, for instance, noted that she is now more mindful when it comes to physical activity—i.e., why am I engaging in this activity? For health reasons or appearance? Abbie also discussed mindfulness and being more compassionate with regard to how she approaches her anxiety. Mindfulness and self-compassion seemed to act as ways to help reduce some of the self-judgement that some of the participants had. This, too, however, was not a cure: While Brianne practices mindfulness, she simultaneously feels like a failure for not being able to run. Brianne's example, as well as the experience of many of the participants, more generally, illustrates the complexity of the issue, most notably that there is often not a cure or complete recovery, but rather engagement in an ongoing project of self-care to manage thoughts, compulsions and related behaviors.

Brianne's reference to self-compassion is pertinent as there is a growing body of literature focused on the power of being compassionate towards oneself—specifically related to one's relationship with physical activity and body image. While the psychological benefits of self-compassion have been established (e.g., Neff, 2003), researchers are now looking at how self-compassion can help people—

particularly women and girls—develop healthier relationships with their bodies and physical activity. (This will be expanded on in Chapter 7)

Conclusion

The participants' narratives highlight the complexity of being physically active while managing OCD and other mental and physical health issues. All of the participants acknowledged positive, holistic benefits derived from being physically active. Indeed, for some, it seemed to be central part of their identity, or a staple in their lives—something that brought enjoyment, symptom reduction, and social opportunities, among other benefits. At the same time, however, the participants' stories spoke to the partial or limited effectiveness of physical activity in helping them to manage their symptoms, as well as the way in which their mental and physical health issues posed barriers to engagement. Unlike some of the dominant discourses identified in Chapter 4, exercise was not seen to be a quick fix or cure, or something that can be easily done with little more than a pair of walking shoes (see Chapter 5). Importantly, while the participants do take up some of the messaging related to the benefits of physical activity (e.g., the role of endorphins, the belief that it is part of a healthy lifestyle), at the same time, they push back against some of these taken-for-granted discourses by discussing their struggles with physical activity, its limited effectiveness, or its role in exacerbating mental health issues, such as eating disorder symptomology. In this way, they are simultaneously reiterating and challenging some of the dominant messages that shape the exercise is medicine moment. In the final chapter, I synthesize the findings from all three empirical chapters, providing suggestions for ways to make physical activity more accessible,

meaningful, and healthy for people with mental health issues. I conclude with a discussion of future research possibilities.

Chapter 7: Conclusion

In recent decades, physical activity has been increasingly promoted as a treatment for mental health issues. I explored this topic—which has received little critical attention—through three different empirical studies. In line with a physical cultural studies approach to research (Silk & Andrews, 2011), the overall aim was to contextualize the ‘exercise is medicine for mental illness’ phenomena. This was done with specific attention to the myriad political, economic, sociocultural, ideological, and technological forces are coming together to create the context in which exercise is medicine for mental illness exists. The findings from the first empirical study suggested that while much of the discourse focused on mental illness and physical activity is somewhat nuanced, there continue to be an overarching narrative that positions exercise as a cure, juxtaposes exercise with pharmaceuticals, or glosses over the difficulties of being physically active while having a mental health issue. Similar themes were found while examining the EIM website. At the same time, few resources are provided to help healthcare providers, exercise specialists, and public health practitioners help people with physical activity be more active through one-on-one treatment, or the creation of meso and macro-level changes. The reasons for such messages and the lack of resources to create substantial change can be seen to be a symptom of the neoliberal, healthist moment in which individual solutions, personality responsibility, and privatization replace more communal, government sponsored solutions to (mental) healthcare (Crawford, 1980, 2006; Ingham, 1985; Lupton, 1995; Petersen & Lupton, 1996).

Based on the interviews with women with OCD (Chapter 6), it seems as though many of the messages related to the benefits of physical activity for mental illness have been internalized, to varying degrees. However, the participants also discussed ways in which they resisted or pushed back against some narratives that they found to not resonate with their lived experience (to be revisited below). In this way, the women's experiences both reproduced various aspects of the current exercise is medicine moment (i.e., that physical activity can be a helpful in treating particular mental illnesses; exercise is part of a healthy lifestyle, etc.), while simultaneously resisting or challenging others (i.e., the benefits of exercise prescriptions; the curative properties of physical activity; the supposed ease with which one can be physically active).

Taken as a whole, the results from this research point to the need for: 1) better messaging related to physical activity as a mental health treatment; 2) programming to help treat or prevent mental health issues; 3) resources and training for healthcare providers, exercise specialists, and other professionals; and 4) increased activism and advocacy related to mental health treatment and social determinants of (mental) health. In what follows I elaborate on these suggestions, reiterating (and tying together) several points made earlier in paper. I conclude with a discussion of future research that can build on this research project.

Better Messaging

As evidenced across the three empirical chapters, it is clear there is a need for more nuanced, sensitive, and comprehensive messages related to physical activity and mental health. With regard to discourse focused on physical activity and mental

illness, it is important that content circulating in the popular press, educational materials, policy documents, and even discussions among lay people recognize the complexity of mental illness and take care to frame information accordingly. Indeed, the increased attention to the mental health benefits of physical activity described in Chapter 4 have an impact on people's understanding of mental health and exercise. As previously mentioned, many of the participants in Chapter 6, for instance, referenced messages they had heard about the mental health benefits of physical activity. While it is unclear to what extent this information affected their behavior, for some, it had an impact on how they felt about themselves and their recovery process. Amanda, for instance, noted that the more extreme messages that positioned exercise as a cure made her feel worse about herself as she was physically active, yet still struggling with depression and OCD. In other words, she was taught to believe that exercise *should* make her feel significantly better, but when it did not, she viewed that as a personal shortcoming. In this way, it is important to emphasize that many people with moderate to severe mental illness require a comprehensive, individualized treatment plan that may incorporate numerous treatment modalities. This can include medication, psychotherapy, lifestyle approaches (e.g., diet, exercise, sleep), or meditation, among other wellness strategies.

In addition to more nuanced and less sensationalized messaging relating to the therapeutic benefits of physical activity, it is important that exercise content is framed in a way that encourages healthy relationships with physical activity—particularly among women and girls—and does not contribute to poor mental health outcomes such as low self-esteem, depression, disordered eating/eating disorders, or

excessive exercise. For instance, as noted by researchers (e.g., Dworkin & Wachs, 2009; Markula, 1998), and reiterated by many of the participants in Chapter 6, exercise is too often tied to appearance. Women and girls, through the media, as well as school, family, and peers, continue to be told that their self-worth is based on how they look. They are encouraged to live up to impossible standards: fit, yet thin; toned, but not *too* muscular. As some of the participants confirmed, such discourse directly affects how they relate to physical activity and their bodies. Physical activity or exercise becomes less about connecting with one's body in a way that feels good, or is health-enhancing; instead, it is primarily about achieving a particular aesthetic.

Some of the participants specifically mentioned that different messages related to physical activity need to be put forth. Amanda, for instance, suggested adults sit down with future generations and describe to them the different “looks” that health can take (i.e., one can appear overweight and still be healthy). Fortunately, there are increased efforts to promote body positivity and an appreciation for a diversity of body types, with initiatives such as Health at Every Size (HAES) and “fatspiration” as examples (Webb et al., 2017). Researchers also suggest that cultivating self-compassion—or an unconditional love and acceptance for oneself—can help to protect against negative body image and engagement in exercise for reasons other than health or enjoyment (i.e., appearance-related motivation; Magnus, Kowalski, & McHugh, 2010). Slater, Varsani, and Diedrichs (2017), for example, suggested that self-compassion messages be incorporated into social media content—particularly that which is focused on fitness—as a way to improve mood, body satisfaction, and body image.

Additionally, it is important that women and girls are able to critically analyze the messages that circulate pertaining to exercise and appearance (among other topics). With the rise of social media, girls are exposed to appearance and fitness-related content at higher rates. While content that glorifies the ultra-thin ideal may be viewed critically by consumers, it has been suggested that fitspiration images that feature athletic-looking women may not receive the same scrutiny as they appear (deceptively) more attainable if one works hard and is disciplined (Mulgrew & Tiggemann, 2016). However, viewing such content can lead to higher levels of body dissatisfaction and negative mood among young women (Robinson et al., 2017; Tiggemann & Zaccardo, 2015). It is therefore important that such fitspiration messages and images are deconstructed, critiqued, and incorporated into critical media literacy programs.

Programming

In addition to messaging, there is a need for additional programming to help treat or prevent mental health issues. As it can be difficult for people with mental illness to be physically active, exercise specialists can play an important role in mitigating barriers to engagement. For example, developing exercise programming that takes into account participants' unique needs and skills—including social determinants to physical activity, such as transportation and money—can help make physical activity more accessible to this population. The EIM initiative has the potential to help facilitate such program development as it serves as a hub, connecting a variety of public health and exercise organizations. EIM can take an active role in initiating the development of exercise programs for people with mental illness, or, at

the very least, provide resources on their website that speak to the need for such programming. Collaboration with prominent mental health organizations, such as the National Alliance on Mental Illness (NAMI), may also be an effective way to develop wellness initiatives that serve this population.

Physical activity programming can also help to promote positive mental health and, in some cases, serve as a protective mechanism against mental health issues. For instance, as previously noted, physical cultural practices and messages that equate exercise with appearance can lead to a host of negative health outcomes, including body dissatisfaction, disordered eating or eating disorders, exercise compulsions, depression, or low self-esteem (Markula, 1998; Strelan et al., 2003). However, programming that disentangles movement with appearance, and instead re-focuses attention on how one *feels* instead of how one looks, as well as the body's functionality, has been found to help promote positive body image in women and girls. As an example, Scott and Derry (2005) developed a course for undergraduate students that not only taught students about issues pertaining to women's bodies (e.g., violence against women, body image, objectification, etc.), but included experiential learning in which students participated in embodying activities such as rock climbing, weight training, and boxing. Such education (i.e. consciousness raising) combined with movement allowed them to break free of traditional gender norms and develop a love of physical activity that could serve to promote holistic wellness throughout their lives.

It is particularly important that physical education offered to children and adolescents—particularly girls and other disenfranchised youth (e.g., LGBTQ

population, racial and ethnic minorities, youth with disabilities, etc.) promote physical activity in a way that promotes mental health and a love of movement by de-centering a focus on weight or skill, and, instead, focusing on embodiment and pleasure.

Researchers have argued that physical education in Western nations can focus inordinate attention on weight (e.g., Gard & Wright, 2001; Jette et al., 2016), and, in some cases, promote the idea that weight loss will lead to better athletic performance (Rich & Evans, 2005)—a sentiment that was echoed by some of the participants in Chapter 6 when recalling past experiences with eating disorders. In addition, physical education curricula and structure can be seen to ostracize youth who are not athletically inclined, or “othered” based on gender identity, sexuality, race, or ability (Sykes, 2011). In this way, it is no surprise such youth participate in physical activity at lower levels than their peers (Calzo et al., 2014; Slater & Tiggemann, 2011). As some marginalized youth face mental health disparities due, for instance, to minority stress (e.g., Burton et al., 2013), it is especially important that they have an opportunity to learn to appreciate their bodies, and develop a variety of strategies to prevent against poor mental health. This cannot be achieved without safe, supportive physical education environments that teach physical activity in ways that promote (mental) health and holistic well-being.

Training and Resources

The development and implementation of effective programming cannot be fully realized without properly educated and trained healthcare providers and exercise specialists. In order to help people with mental illness be physically active in safe and fulfilling ways, such professionals—including, but not limited to, personal trainers,

exercise physiologists, physical or outdoor educators, physical and occupational therapists, medical doctors, nurses, social workers, psychologists—must be knowledgeable with regard to how particular physical activities may exacerbate the symptoms of various mental illnesses. This includes an awareness of the unique barriers to engagement in physical activity that may accompany a particular mental illness. Based on the findings from Chapter 6, exercise specialists and healthcare providers should be aware that women with OCD may not be able to participate in certain forms of exercise if it triggers one of their obsessions. For instance, some participants described how fear of germs or dirty-appearing environments, sexuality-based obsessions, or the need for symmetry limited the types of activities in which they could engage. For others, the intersection of OCD and eating disorders or disordered eating led to compulsive exercise routines that, at times, compromised their physical and mental health (e.g., overuse injuries). While the majority of the participants in this study were self-aware and developed strategies to be physically active despite their obsessions and compulsions, it is possible that many people with OCD—and other mental health issues—may need more guidance identifying ways to be physically active.

As discussed in Chapter 5, the EIM website can serve as an important source of information related to exercise and mental health. The two-page informational handout related to generalized anxiety and depression that is currently on the website is a good starting point, but could be expanded to include more mental health issues, such as bipolar disorder, schizo-affective disorders, eating disorders and exercise addiction, anxiety disorders beyond generalized anxiety (e.g., PTSD, social phobias,

etc.), and obsessive-compulsive and related disorders. In addition, it is important to include attention to such mental health issues in the EIM credentialing so that EIM certified exercise specialists have an adequate baseline knowledge of mental illness. It may also be useful to develop a specialized training program or certification for exercise specialists focused specifically on mental illness.

Exercise professionals, however, should not be expected to serve as both fitness specialists and mental health experts. It is imperative for trans-disciplinary teams to be formed when working to help people with mental health issues become more physically active. As discussed previously, there are great examples of such collaborations (e.g., the In SHAPE intervention). While it is encouraging that a range of mental health professions seem to be increasingly amenable to thinking about the profession's role in studying or promoting physical activity,⁴² more efforts are needed to make exercise and physical activity a central component of such profession's work. Without greater attention to physical activity in training future mental healthcare providers, such as doctors, nurses, social workers, and psychologists, they may miss valuable opportunities to help their clients engage in safe, fulfilling, and therapeutic physical activity. This could take the form of not discussing physical activity as a treatment option, insensitivity related to the barriers and difficulties of being physically active with a mental health issue, exaggerating the therapeutic potential of physical activity, or perpetuating harmful associations between exercise and appearance or self-worth. As an example, Valerie (Chapter 6) noted that she believes most healthcare providers, aside from psychiatrists, do not understand how difficult it is to be physically active when dealing with mental (and physical) health issues. She

recalled hearing simplistic advice to “just do X”, to which she responded that *nothing* is that easy. Making resources related to mental illness and physical activity more accessible to both exercise specialists and healthcare providers, through the EIM website, as well as other modalities (e.g., incorporating content into the curricula of social work, nursing, and medical programs) could lead to overall better care for people with mental illness.

Advocacy and Activism

While more nuanced messages related to mental illness and physical activity, along with comprehensive programming and resources tailored to the needs of this heterogeneous population are needed, it is important that efforts are taken to advocate for structural, systemic changes related to mental health. This could take numerous forms, including policy changes that would allocate additional government funding for wellness initiatives—including physical activity programming—for people with mental illness, efforts to increase awareness of mental illness and reduce the stigma associated with it, or community organizing and direct action focused on addressing inequality faced by marginalized populations (as such inequality can lead to particular forms of mental illness). What is important is that exercise specialists and physical activity organizations see part of their professional mission or role as including that of an advocate. In other words, they are not only providing direct services, but actively advocating for the changes and conditions needed for their clients to thrive. Exercise specialists may, for instance, write op-eds or blog posts aimed at reducing weight-based stigma within fitness settings, write to their elected officials asking for sidewalks to be built or improved in low-income neighborhoods, or partner with a

local mental health center in order to offer subsidized programming. As touched on in Chapter 5, organizations, such as EIM, can similarly participate in such efforts.

Exercise specialists can serve not only as advocates and activists, but they can encourage their clients to take on such roles as well. As an example, physical educators or professionals working with youth may assign homework that gets students to think about and engage with issues related to mental health from a macro-level perspective. As an example, Hesse-Biber and colleagues (2006) suggested getting involved in Eating Disorder Awareness Week efforts—something that can be incorporated into the curricula of physical education or health courses. Another activity may involve having students post a physical activity related image and message on social media that promotes both body positivity and self-compassion (see, for example, Slater, Varsani, & Diedrichs, 2017).

Future Research

OCD and body image. While there is a growing evidence base focused on physical activity and mental illness, there is strikingly little work on OCD. In what follows, I focus on potential future research based on the findings from this dissertation research; specifically, work could focus on: 1) physical activity experiences as they relate to the content of obsessions and compulsions (i.e., germs, symmetry, food, sexuality, etc.), as well as social location (i.e., race, class, sexual orientation, etc.); 2) examination of the physical activity experiences of people with OCD participating in exercise referral schemes, such as EIM; and 3) evaluation of messages and programming aimed at promoting positive body image. Overall, the objective of my future research is to better understand the exercise experiences of

women with OCD—or related disorders—in order to help inform messaging and programming that has the potential to make physical activity more accessible and meaningful to this population.

My research on the exercise experiences of women with OCD (Chapter 6) is a first step in understanding this multifaceted topic. One area for future research pertains to potential differences in exercise experiences based on the content of one's obsessions and compulsions. In hearing the participants' narratives, there appeared to be differences in the barriers to physical activity participation based on the type of obsessions and compulsions the women were facing. As an example, participants with weight-related obsessions recalled engaging in rigid exercise routines—at times, sacrificing their physical and mental health—in an attempt to lose weight. Participants with a fear of germs or dirt, on the other hand, tended to avoid particular activities or places, such as group exercise classes, water aerobics, running in their neighborhood if it appeared dirty. However, due to the relatively small sample size, and the heterogenous nature of the participants' obsessions and compulsions, more research is needed to better understand how particular obsessions and compulsions may affect physical activity. Interviewing women with one type of obsession (e.g., germs) may help to gain further insight into the unique challenges of exercising while struggling with that form of OCD. In addition, examining the differences between physically active versus physically inactive women with a particular type of OCD could allow for an even deeper analysis of barriers, as well as facilitators, to physical activity.

Future research could also focus on the ways in which the intersection of oppressions (e.g., race, class, sexuality, ability) affects the exercise experiences of women with OCD. The women in my study were predominantly white, heterosexual, and well-educated. They were also a relatively physically active, which speaks to their physical ability to participate in exercise. Some participants, however, did speak to the ways in which their physical disability, race, or sexual orientation intersected with their OCD in order to compromise their physical activity experiences. Abbie, for example, felt uncomfortable on an (adult) kickball team as she heard the captain (who removed her from her position for not performing well enough) had racial biases. In addition, her fear of smelling bad, or omitting a body odor, severely inhibited her ability to participate in physical activities as an adolescent and young adult. This fear of body odor can be seen as the result of the intersection of racial and gendered oppressions (Ferranti, 2011). Women in America and other Western nations are taught that their natural odor is bad and must be covered up through deodorants, perfumes, or other personal hygiene products (Roberts & Waters, 2004). In addition to women, black people were historically stereotyped as smelling different from white people. This was used as a way to reify racial difference and justify slavery and segregation (Smith, 2006). Valerie, on the other hand, spoke to the intersection of physical ability, sexuality, and OCD as her chronic fatigue syndrome made it difficult to engage in most physical activities, except water aerobics. However, due to her sexuality-based obsession (i.e., “homosexuality OCD” which made it difficult to be around women in various states of undress) and fear of germs, participating in this activity was nearly impossible. Further research could focus on such marginalized

groups of women in order to learn about other ways race, class, sexuality, and ability intersect with OCD to create unique barriers (or facilitators) to being physically active.

The goal of the aforementioned future research could be used to help create programming and resources for different groups of women with OCD. For example, understanding the ways in which different forms of oppression operate to create unique barriers for women with OCD can be used to better train exercise specialists who are working with such populations. It can also lead to the development of more comprehensive programming that does not just address individual-level barriers, such as motivation or self-efficacy, but targets systemic obstacles as well.⁴³ In this vein, it could also be useful to examine the exercise experiences of individuals with OCD who are currently participating in exercise interventions or programs tailored to people with mental illness (see literature review for examples of such programming). Analyses of most physical activity interventions for people with mental illness have not focused specifically on participants with OCD.⁴⁴ It would be beneficial to understand the benefits and shortcomings of such programming in order to develop more effective programs and strengthen those already in existence.

Resources, training, and professional development. As discussed above, it is important for healthcare providers and exercise specialists to be well-versed in the intersection of mental illness and physical activity. There remains a dearth of research, however, on such professionals' views on this topic. Future research focused on exercise specialists can assess their knowledge of mental illness, willingness to learn more about mental illness and receive training, and their attitudes

towards people with mental health issues. Extant literature, for instance, suggests that exercise professionals are not well-versed in mental health issues, though they are willing to learn—particularly with regard to depression (Stanton, 2013). Qualitative research could help to gain more in-depth understandings about different types of fitness specialists—for instance, those with different types of credentials, training, and specialization— and their knowledge of and attitudes towards this population.

It is also important to understand what (future) exercise professionals are taught in higher education curricula with regard to working with, and advocating for, people with mental illness. Similar to Corliss, Shankle, and Moyer's (2007) examination of the extent to which US schools of public health included curricula and resources related to LGBTQ issues,⁴⁵ future research could take the form of surveys of kinesiology, exercise science, physical education, and related programs in order to assess to what extent topics related to mental illness, and issues of social justice more broadly, are incorporated into the program. Are students, for example, required to take a course in which sociological concepts are discussed? Or, best case scenario, is attention to social justice infused into most—if not all—of the courses in the program? One may object that this is impractical as courses such as biomechanics or exercise physiology do not lend themselves well to discussing issues of power, oppression, and (mental) health disparities. However, as discussed in the theoretical portion of the literature review, the biological, psychological, sociological, and cultural are intertwined and, I would argue, best addressed as an amalgamation as opposed to disparate parts. In other words, much can be gained from an exercise physiology course that examines physiological processes as not purely biological in

nature, but always in communication with psychological, sociological, and cultural processes.

In a similar vein, more research is needed to understand how different types of mental healthcare providers understand physical activity as a treatment option or part of a holistic wellness routine, and if—and how—they discuss this with their clients. While there is growing attention to this, particularly in nursing (Happell, Platania-Phung, & Scott, 2011), I am particularly interested in how social workers think about physical activity, as well as the extent to which (critical) discussions of exercise and physical activity is incorporated into their formal education. Indeed, there has been some scholarly attention to the physically active body in social work research (e.g., Lawson, 2005; Leedy, 2009; Mensinga, 2011; Moe, 2014; Williams & Streat, 2006), yet, to the best of my knowledge, physical activity remains tangential in the larger social work literature, education, and practice.

Appendix A

Overview of Popular Press Search (Ch. 4)

Search Engine/Databa se	Search Terms		Filters	Number of Hits	Notes
Lexis Nexis	“OCD” AND “Physical Activity”		Newspaper s only; high similarity articles excluded	149	
Lexis Nexis	(obsessive compulsive disorder or OCD) AND (physical activity OR exercise OR fitness OR sports)		Newspaper s only; high similarity articles excluded	977	
EBSCO/ The Reader’s Guide to Periodical Literature	"mental illness" AND "physical activity" or exercise		Magazines	9	
EBSCO/ The Reader’s Guide to Periodical Literature	(Subject) depression" AND "physical activity" or exercise		Magazines	57	
EBSCO/ The Reader’s Guide to Periodical Literature	"generalized anxiety disorder" AND "Physical activity" or exercise		Magazines	1	
EBSCO/ The Reader’s Guide to Periodical Literature	“bipolar” AND “Physical activity” or exercise		Magazines	1	
EBSCO/ The Reader’s	“schizophrenia AND “Physical		Magazines	1	

Guide to Periodical Literature	activity” or exercise				
EBSCO/ The Reader’s Guide to Periodical Literature	“Post-traumatic stress disorder” and “Physical activity” or exercise		Magazines	4	
EBSCO/All Databases	“Mental illness” AND “Physical activity” or exercise		News	59	
EBSCO/All Databases	“Depression” AND “Physical activity” or exercise		News	306	I only reviewed the first 15-20 or so articles as data saturation had been reached at this point.
EBSCO/All Databases	“Generalized anxiety disorder” AND “Physical activity” or exercise		News	0	
EBSCO/All Databases	“Bipolar disorder” AND “Physical activity” or exercise		News	1	
EBSCO/All Databases	“Schizophrenia” AND “Physical activity” or exercise		News	5	
	“Post-traumatic stress disorder” AND “Physical activity” or exercise		News	5	
Approximate number of articles included in the final sample				460	Apprx. 358 articles came from the Lexis Nexis OCD searches,

					and 102 from the EBSCO searches
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Appendix B

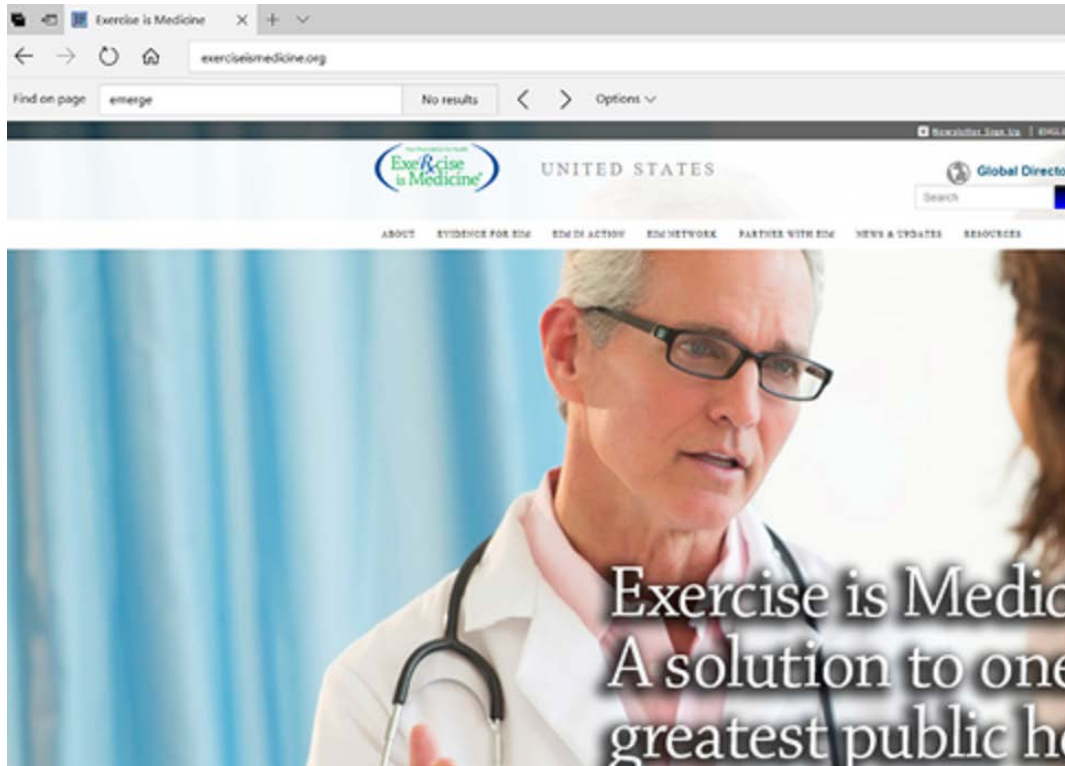
Overview of Exercise is Medicine Website Layout (Ch. 5)

Heading	Sub-Headings	Second Level Sub-Headings
About	EIM Solution	Healthcare Stakeholders Community Resources Physical Activity Digital Health
	EIM Leadership	Meet your EIM Leaders EIM Emerging Leaders
	EIM Committees	
	EIM Staff	
	EIM Global Leadership and Collaboration Center	Research and Surveillance Implementation and Evaluation EIM Technology Conference 2016
Evidence of EIM	Physical Activity and NCDs	
	Physical Activity in Healthcare	
	Cost Effectiveness	
	Latest Research News	
EIM in Action	On-Going Initiatives	Take the Pledge! EIM Credential Workshops EIM Month 2017 EIM on Campus Month
	Healthcare	Healthcare Providers Healthcare Organizations Healthcare Systems
	Exercise Professionals	EIM Exercise Professionals [sic] Stories from the Field EIM Credential
	EIM in the Community	Schools and Workplaces Older Adults Community Populations EIM Ambassadors
	EIM on Campus	Current Schools Recognition Program

		Register Your Campus Today!
EIM Network	Global Center	
	Regional Center	Regional Updates
	National Centers	
	Local Communities	EIM-Greenville EIM-The Claremont Club
Partner With EIM	Program Partners	Health Fitness Organizations
	Industry Partners	Meet Our Industry Partners
	EIM Advocates	
News and Updates	EIM Advocate Newsletter	Stories from the Field
	News from Our Industry Partners	
	EIM Scorecard	
	Global News	
	Surgeon General's Call to Action	
Resources	Health Care Providers	
	Your Rx for Health Series	
	Exercise Professionals	LaRue Cook
	Community Members	
	Colleges and Universities	

Appendix C

Images from the Exercise is Medicine Webpage (Ch. 5)



EIM website: Homepage. Image taken October 24, 2017.



EIM website: Example of headings, sub-headings, and second level sub-headings.

Image taken October 24, 2017.

Appendix D

The Exercise Experiences of Women with OCD: Participant Demographics and Symptom Overview (Ch. 6)

Participant	Age	Race	OCD Symptoms	Other mental health issues	Physical health issues
01	20s	Asian	-Handwashing/germs (though doesn't seem to cause <i>too</i> much distress or time)		
02	35	White	-Rituals (e.g., clothes folding) -Scrupulosity -Germ fears -Sexual obsessions (re homosexuality) -Fear of harming others (e.g., her dogs)	-Bipolar Disorder -Depression -Self harm -Borderline Personality Disorder (potentially)	-Fibromyalgia -Due to OCD: tight, tense muscles, chest pain, headaches, body tics, tiredness from anxiety and engaging in rituals, stomach problems
03	28	White	-Trichotillomania (hair pulling) -Shirt folding	-Depression mixed into OCD	
04	20s	Black	-Sexual obsessions (e.g., porn; intrusive sexual thoughts) -Past: Germs/handwashing; TV shows		
05	25	White	-“Classic OCD symptoms” -Cleanliness and safety fears	-Anxiety (though most likely associated w/ OCD)	
06	29	White	-Fingerpicking -Food obsessions -Anorexia in high school (tied up in athletic performance), but not currently		

07	24	White	-Food, weight, exercise -Obsesses about things she has to do (and will cancel activities to do seemingly minor things that seem urgent to her) -Believes she has eating disorder (was diagnosed when younger) with OCD symptoms		
08	22	White	-Health anxiety (fear of having a disease)	-Panic attacks	
09	21	White	-Scrupulosity (has to do the 'right' thing; black and white thinking)		
10	26	White	-Trichotillomania -Anorexia	-Social phobia (though this is thought to be on the OCRD spectrum) -Bipolar Disorder	
11	23	White	-Surroundings need to be perfect -Makes lists to relieve anxiety		
12	20s	White	-Can't step on sidewalk cracks -Symmetry: if people touch her, it must be symmetrical -Germs (in the past?) -Trichotillomania (past?)	-Depression	

13	43	Black	-Fear of smelling bad	-Depression	
14	20s	Asian (India n)	-Fear of germs/diseases	-Depression	-Gastro-intestinal issue

Appendix E

The Exercise Experiences of Women with OCD: Interview Guide (Ch. 6)

Interview Guide for 1st and 2nd Interviews

Thank you for agreeing to participate in this research project. As I've mentioned, we are interested in learning about women's experiences with OCD—an illness we feel is not well understood. We appreciate you taking the time to share your experiences, and, I assure you that everything you say today will be kept confidential to the maximum extent possible. You will also have the opportunity to see any information that may be submitted for publication or presentation. Are you ready to begin? I will be asking you a series of questions pertaining to your mental and physical health, but I'd like to begin by getting to know a little bit about you.

Part I: Background Information

1. Tell me about yourself. How do you enjoy spending your time? What is meaningful to you?
 - Probe for: music, physical activities, family, pets, travel, hobbies
 - Do you have any fun plans/did you do anything enjoyable this summer?

Part II: Conceptualizations of Health

Now we are going to talk a bit about your thoughts on 'health'.

2. What does 'health' mean to you?
 - a. What are some of the things a person can do to be healthy? What would you consider to be 'unhealthy'?
3. What does 'mental health' mean to you?
 - a. What are some things a person can do to be mentally healthy? What would you consider to be 'mentally unhealthy'?
4. What do you think shaped or informed your ideas about physical and mental health?

- Probe: Media (TV, news, movies); Family; Personal experiences; academic literature

Part III: OCD Specific Questions

Okay, now we are going to move into OCD-specific questions, but feel free to veer off the topic as you see fit.

5. I'd like to learn about your mental health history? To start...
 - I see on your survey that you self-identify as having Obsessive-Compulsive Disorder (OCD). Why do you self-identify as having OCD?
 - Tell me more about that—what is it like to experience obsessions and compulsions? What is the content of your obsessions? Compulsions? Has that changed at all? What was that like?
6. When did you first realize that you may be experiencing OCD? What was your experience like?
 - Did you do anything to manage it (e.g., see a GP, psychiatrist, psychologist, take medication, read books, consult websites, etc.)? What made you decide to use those management strategies over others?
7. How, if at all, does physical activity play a role in your experience of OCD? [Note: I also probed for their thoughts on exercise prescriptions—e.g., how they would feel if their doctor psychiatrist or GP prescribed them exercise instead of medication. Or exercise in addition to medication.]
8. How, if at all, does OCD impact your life on a daily basis? Your health?
 - Do you currently do anything to try to manage it? What made you decide to use those management strategies?
 - Does anything prevent you from managing it in the way you wish to? Does anything or anyone enable you to manage it more effectively?

(POSSIBLE STOPPING POINT FOR INTERVIEW 1):

Okay, great. I think this may be a good place to stop for today. Thank you so much for sharing. I look forward to picking up where we left off next time we meet (CONFIRM NEXT MEETING DATE AND TIME)

INTERVIEW 2:

Last time we met you told me about (RECAP). I just wanted to revisit a few things you mentioned to make sure I understand (CLARIFICATION/MEMBER CHECK). Okay, and just to pick up where we left off, I'd like to learn more about the way OCD may affect your life on a daily, but also, long term basis.

9. Do you think OCD has prevented you from doing things that are meaningful to you (career goals, leisure pursuits, social activities)? Do you think it has enabled you to do things that are meaningful to you?
10. How, if at all, has OCD affected your educational opportunities and experiences?
11. How does OCD make you feel physically? Emotionally? (e.g., are you in pain? Sad? Overwhelmed?)
12. Have you ever felt bad about having OCD (e.g., self-conscious, less-than, abnormal)? Do you have strategies to manage that?
 - Do other people know about your experiences with OCD? If so, whom? If not, why is that?
13. Have you ever felt like having OCD was a benefit? If yes, how so? If no, why not?
14. Do you feel like lay people have a good understanding of what OCD entails? Do you think they have a good understanding of what your daily experience with OCD is like?
 - What, if anything, do you think others should know about OCD?
15. What do you think is the cause of OCD? Do you think your understanding of the cause of OCD affects how you manage it? Do you think it affects how you understand your experiences?
16. If you don't mind sharing, do you have any other mental or physical health issues? Do you think those affect your experience with OCD in anyway?
17. How, if at all, has OCD affected your romantic/sexual relationships? (e.g., initiating relationships; longevity; ability to be intimate, etc.)
18. On a scale of 1-10, how do you feel right now? Mentally? Physically? Can you identify anything that would help you feel better in general? More healthy?

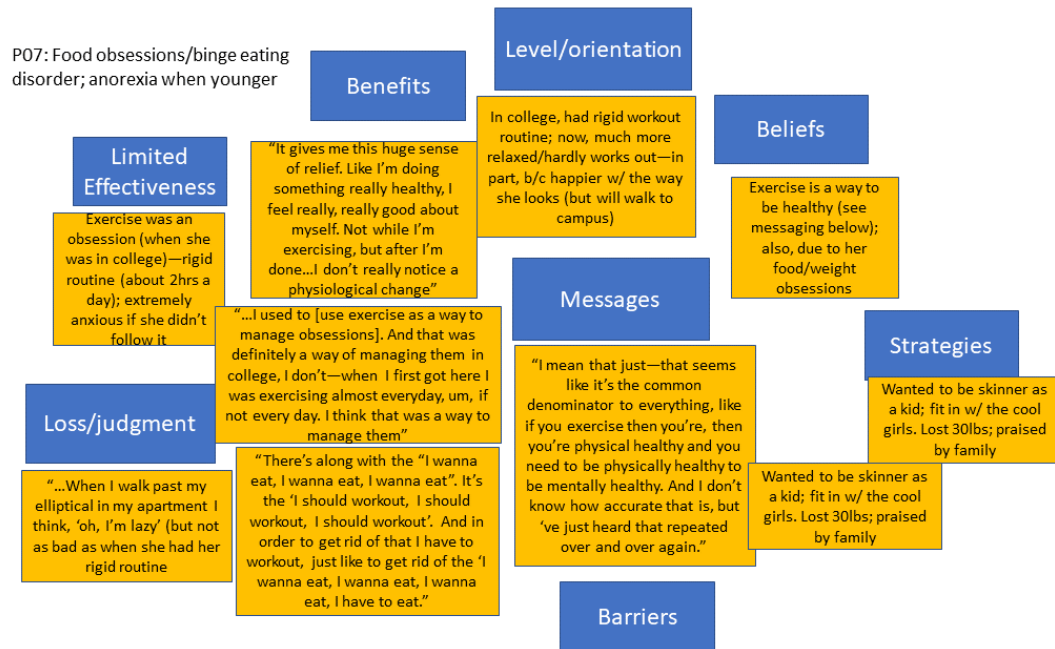
Those are all of the questions I have. Is there anything else you would like to add, or anything you think I should know?

Thank you so much for your time and for sharing your experiences. I will be in touch.

END OF INTERVIEW

Appendix F

Example of an Analytic Diagram (Ch. 6)



Footnotes

Chapter 1: Introduction

¹ I use the terms physical activity and exercise interchangeably throughout the paper. While I am aware of the differences between the two terms—i.e., exercise is considered to be “...a subset of physical activity planned, structured, and repetitive and has as a final or an intermediate objective the improvement or maintenance of physical fitness” (Caspersen, Powell, & Christenson, 1985, p. 126)—they are frequently used interchangeably in the academic literature, public health initiatives and popular press articles. Dugdill, Graham, and McNair (2005) pointed out that the two terms are used so interchangeably in exercise referral scheme documents that the schemes may best be relabeled “physical activity referral schemes” (Dugdill, Graham, & McNair, 2005, p. 1395).

² Exercise is Medicine was formed in 2007 by the American College of Sports Medicine and the American Medical Association. The aim is to encourage healthcare providers to prescribe exercise as they would a pharmaceutical in order to treat chronic illnesses to make physical activity accessible to people with mental illness (e.g., Berryman, 2010). They are also working to make physical activity levels a fifth vital sign that providers would screen for, and record, at each appointment (Sallis, 2011).

Chapter 2: Review of Literature

³ The DSM is a text used by mental health professionals in the US and other nations to diagnose people with particular mental illnesses.

⁴ See also: Melanie Rock's work on transhumanism and public health as another example of this; Rock & Degeling, 2015; Rock, Degeling, & Blue, 2014.

⁵ Halfway through the previous quote, I would also add culture (i.e., the body and psyche are affected—and in turn affect—culture).

⁶ PCS has tended to give little attention to the materiality and agency of the biological and the way it contributes to shaping a given phenomena. See, for example, Esmonde & Jette, 2017; Millington & Wilson, 2017; Thorpe, 2014.

⁷ To be clear, the goal of producing research and praxis committed to creating a more equitable society is not unique to PCS. Other disciplines or fields, such as social work, women's, gender, and feminist studies, critical race studies, critical public health, and nursing, among others, have similar aims. See, for example, Bay-Cheng, 2016; Boutain, 2005; Krieger & Birn, 1998; Reisch & Andrews, 2002.

⁸ Fitspiration can be seen to be closely linked to thinspiration (Boepple & Thompson, 2016). Thinspiration is associated with pro-eating disorder ideologies and consists of messages and images that seek to inspire one to lose weight—often, or primarily, through restrictive eating or excessive exercise (Boepple & Thompson, 2016).

⁹ This is perhaps not surprising given the way in which yoga has become Westernized and incorporated into mainstream fitness culture. For example, Webb and colleagues (2017) found that popular yoga magazine covers feature

predominately young, white, thin women as models who are often shown in positions that require great physical strength and flexibility.

¹⁰ Fullagar (2017) made similar arguments regarding “exercise is medicine” initiatives.

¹¹ This is not surprising given that countries, such as the UK, have had exercise referral schemes in place since the early 1990s. The US has not had such structured exercise referral programs.

Chapter 3: Methods

¹² Interestingly, this search generated a high volume of articles that focused on sports figures, such as David Beckham, who were reported to have OCD.

¹³ For the EBSCO newspaper search with key terms “Depression” AND “Physical Activity” OR “Exercise”, 306 hits were generated. I reviewed the articles until saturation was reached (around 20 articles) or, in other words, no new themes were being introduced with the inclusion of additional data sources.

¹⁴ While the initial themes I had developed during the first stage of analysis guided my thinking during subsequent stages of analysis, I remained open to cases or examples that challenged the validity of a particular theme, and made adjustments as necessary.

¹⁵ I wanted to ensure that the complexity of participants’ experiences was adequately conveyed as to challenge simplistic understandings of physical activity for mental health.

Chapter 4: Exercise is Medicine: Dominant Discourse Identification

¹⁶ Exercise is considered a modifiable risk factor, which is part of the appeal—the idea that it can be ‘easily’ changed, as opposed to supposedly fixed things, like genetics, or wider structural change.

¹⁷ It is important to highlight that in many of these articles, depression is colloquially described as “the blues”, or its antithesis labeled as “happiness.” Clinical depression, however, is not synonymous with sadness or having “the blues”; and recovering from depression does not mean one is “happy.” This type of rhetoric can also be seen in descriptions of antidepressants as “happy pills.”

¹⁸ I had an exchange on Facebook with a local rock climbing gym that posted a link to a magazine article whose headline read: “Research shows bouldering is a cure for anxiety and depression” (Steele, 2017). I pointed out that such articles promote misinformation and can cause (unintended) harm to people with mental illness. A representative from the facility wrote back with an acknowledgment that their organization does not believe rock climbing can cure mental illness, yet if I read the article, I will see that the content of the article is more nuanced than the title. I responded by noting that many social media consumers most likely do not click on the article itself, but take in the message conveyed by the headline while scrolling through their, Facebook newsfeed.

¹⁹ There was a comment posted below this meme—presumably posted by the creator— that read : “I hope you guys know that this post doesn’t mean that it’s okay to be addicted to exercise to the point where you can actually hurt yourself, but that it’s okay to actually really like to exercise” (Reasons to be Fit, 2011b).

²⁰ It is interesting to consider the preference for natural products given that many things that can arguably be considered more natural, such as viruses and bacteria, can often be *harmful* to one's health (Gather, 2011).

²¹ Orthorexia was a term developed by an alternative medicine physician, Steven Bratman, in 1997. It describes people who have a pathological concern with healthy eating, to the point that it is an all-consuming obsession that affects their quality of life. For instance, people may not be able to socialize with friends as their eating routines are so rigid. Twenty years after his original essay, Bratman (2017) commented that while he is encouraged, albeit surprised, by the way orthorexia has been taken up in the academic literature, he cautions researchers and healthcare providers to not ascribe the label too liberally or in a way that elicits defensiveness on the part of people who could be classified as having orthorexia.

²² This is not to suggest that research on exercise and mental health only takes place in kinesiology departments. Scholars in the fields of nursing, social work, medicine, public health, and psychology, among others, are engaged in such research. However, many of the points raised about the politics of the corporate university and funding arguably pertain to these programs as well.

²³ Such corporate ties to exercise as medicine initiatives is somewhat unique in that unlike other public health messages or campaigns that push back against powerful corporate interests (e.g., smoking cessation), public health promotion related to physical activity *benefits* the fitness industry (Malcolm, 2016).

²⁴ Millington (2016) termed this the “second fitness boom” (p. 1184). The first fitness boom could be considered to have taken place in the late 1970s and into the 1980s inspired by the likes of celebrities such as Jane Fonda.

²⁵ See also, Coveney and Bunton (2003) for a discussion of pleasure within the field of public health.

Chapter 5: Exercise Is Medicine Website Analysis

²⁶ At times, government-funded physical activity initiatives focus on people with disabilities as a whole. Mental illness is often included under this umbrella; however, it is unclear to what extent the unique needs of people with mental illness, versus other types of disability, are addressed in such programming.

²⁷ This analysis is slightly different, however, in that I provide suggestions for improvement alongside critique and analysis of why it is that such information—or lack thereof—is present on the website.

²⁸ As noted in the previous chapter, such a claim is overstating the effectiveness of exercise, particularly for people with more severe forms of depression, and can be seen to perpetuate the stigma attached to psychopharmaceuticals.

²⁹ The informational sheets appear to have been revised in recent months. When I conducted my February 2017 search they were one-page in length, and contained less detail.

³⁰ ANSI = American National Standards Institute; ISO = International Standards Organization. See for instance, American National Standards Institute webpage: https://www.ansi.org/about_ansi/overview/overview?menuid=1

³¹ ACSM = American College of Sports Medicine; CEP = Certified Clinical Exercise Physiologist. RCEP=Registered Clinical Exercise Physiologist

³² The slides were publicly accessible, though I do not know what was actually said in the workshop.

³³ It may seem outside the scope of fitness professionals' roles to address issues such as income inequality or educational disparities; however, these have been found to be key determinants of health. If fitness specialists are dedicated to redress chronic illness, they must be aware of, and actively work to change, such factors that lead to health inequities.

³⁴ In my October 2017 review of the website, there was a video focused on a fitness club in California, the Claremont Club, that in conjunction with private donors and a local hospital, provides exercise programming for people with chronic conditions such as breast cancer and spinal cord injuries.

³⁵ References are not provided to back up these claims.

³⁶ From the little information provided in this section, it remains unclear how EIM is part of this particular type of healthcare management.

³⁷ While these authors bring up important points related to the problems of top-down approaches to health promotion, they also promote some problematic ideas. For instance, Matheson et al., (2015) argued that human-centered design, which seems to incorporate more micro and meso-level changes, is advisable as it is not as difficult to achieve as structural changes, such as “revamping transportation policy, [or] regulating the food industry” (Matheson et al., 2015, p.1483).

³⁸ This is not limited to public health, but the healthcare sector as a whole. See, for example, Connell, Fawcett, and Meagher (2009).

³⁹ Such emphasis on cost savings, evidence, effectiveness, and accountability, and value can also be in other realms, such as academic institutions (e.g., Andrews et al., 2013; Sparkes, 2013). This inevitably affects the types of knowledge that can be produced, which filters down to influence, in this case, public health initiatives.

⁴⁰ I am also aware that many of my aforementioned suggestions for improving EIM take the form of working within the current system, as opposed to revamping it substantially.

Chapter 6: The Exercise Experiences of Women with Obsessive-Compulsive Disorder c

⁴¹ The standard or “gold” treatment for OCD consists of cognitive behavioral therapy (specifically, exposure-response prevention) as well as psychopharmaceutical medication, selective serotonin reuptake inhibitors (SSRIs) (Hirschtritt, Bloch, & Matthews, 2017).

Chapter 7: Conclusion

⁴² See, for example, Lawson (2005); Williams and Streat (2006) for a discussion of physical activity as it relates to social work practice, and Happell, Platania-Phung, and Scott (2011) for mental health nursing.

⁴³ See Eliason (2015) as an example of a health program that addresses issues of social justice alongside more traditional approaches to helping people become more active and healthy.

⁴⁴ See Hodgson, McCulloch, and Fox (2011), as an example of a program that did draw attention to a participant with OCD.

⁴⁵ They also examined how much research focused on LGBTQ issues was taking place within these schools.

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