

Adapting to Deficiency:
Addiction and the Therapeutic Power of Occupation

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Abstract

Occupational therapy (OT) has been greatly influenced by the medical model, despite its origins as an alternative to medicine. OT practice that finds its theoretical basis in a medical model is criticized as limited in therapeutic value, and as lacking boundaries distinguishing OT from other disciplines. By advancing a philosophical anthropology (Gehlen) with biological evidence from detachment theory (Moss), this project identifies and illuminates the power and unique value of occupational therapy. Occupational participation, made possible by OT, is described as a tool for structuring human lives into manageable temporal components with varying degrees of motivation and social interconnection. The value of providing opportunities for occupational participation is described as analogous to the value of instincts in animals' lives; occupations are seen as the core elements that drive and shape human experiences. The inadequacies of current definitions of and research on addiction are reviewed and, as an alternative to current approaches, an occupational model for understanding addiction is outlined. Addiction is described as an attempt to create a manageable life—that is, as an occupation, and the concept of focused flexibility is introduced to normatively distinguish 'addiction-occupations' from other, potentially more 'healthy' occupations. Health is discussed in relation to the proposed philosophical anthropological, social, and biological situation of human beings. Finally, a qualitative study is undertaken to examine whether an occupational model of addiction accurately describes the experiences of addicts, thereby warranting further research. Findings from this preliminary study suggest addiction is experienced as an occupation, and that the concept of addiction as an occupation should be further explored.

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Introduction

“Occupation”

Occupational therapy is a relatively new rehabilitative field that initially emerged just over a century ago as an alternative to medical practice for the treatment of both mental and physical ailments. The practice was founded on the belief and observation by a number of medical and humanities professionals that human ailments could be overcome through regular, productive engagement in occupation. Occupation was not just a term that referred to employed work, but rather denoted all types of human activity that served to provide focus, meaning, temporal structure, motivation, and the pleasure that is derived from being engaged in a task.

The connection between founding philosophical insights and current occupational therapy practice is often not readily apparent. Occupational therapists today work in a diverse range of settings including (but not limited to) school systems, pediatric clinics, rehabilitation hospitals, acute care hospitals, skilled-nursing facilities, and hand clinics. The application of occupational therapy is broad because it is based on the concept that occupation is therapeutic, and thus occupational therapy is warranted whenever factor(s) exist that impede occupational engagement. Occupational therapy training is broad in scope to allow occupational therapists to employ a host of techniques to rehabilitate or compensate for whatever is impeding occupational performance. However, currently, the treatment settings that commonly provide employment for occupational therapists invite occupational therapists to focus on removing, altering, or compensating for impairments, nurturing the perspective that removing the problem makes room for occupational engagement to resume and health to be restored.

This focus on impairment removal, I argue, is why there appears to be a divide between foundations and current practice; the foundational concept was to provide occupational structure to promote well-being, where, by contrast, current practice assumes the existence of occupational well-being and focuses on removing potential impediments to occupational engagement. Unlike current practice, this project does not assume occupational well-being to be the status quo in the majority of human lives, but rather, explores the nature of human beings, instead, as always striving (and often struggling) to create a world of personal meaning¹ through occupation.

Occupational therapy practice appears to be one of many rehabilitative practices that focus on addressing impairments and restoring function. While this therapeutic approach with its vast applications of various treatment methods has undoubtedly aided many individuals in returning to their pre-morbid occupational lives, it is the perspective of this project that, due to the focus on dysfunction, the potential therapeutic power of occupational therapy has not been tapped. Through a reconstruction of occupational therapy's founding theoretical perspective, I pinpoint how a re-informed occupational therapy perspective can be used to address massive, large-scale life problems. In this project, I focus on the problem of addiction.

Occupational Model of Addiction

This project proposes an "Occupational Model of Addiction" and examines its validity for capturing the experience(s) of addiction. Viewing addiction as an occupation revolutionizes the way it is treated, both practically (in various treatment settings) and conceptually (having implications for research proposals and allocation of grant funding for furthering our understanding of the phenomenon of addiction). An occupational model of

¹ This view is a combination of ideas from Moss's detachment theory and philosophical anthropologists, particularly Arnold Gehlen

addiction normalizes ‘addiction’ as comparable to other human, occupational behavior. Consequently, the model implicates addressing addiction from the same conceptual framework(s) we would use to address the activities of occupational beings in general (i.e. occupations).

As an occupational therapist, I believe the foundational concepts of occupational therapy offer a means for both 1) understanding how occupational engagements differentially relate to human well-being and 2) providing a means by which well-being may be cultivated and/or fostered. Unfortunately, the rich, philosophically-well-informed conceptions that emerged in the late 1800’s giving rise to the field of occupational therapy have been abandoned, or at least distorted beyond the point of recognition within the field of occupational therapy (Brachtesende, 2005; Shannon, 1977) . Thus the foundational concepts I believe occupational therapy has (or better, *had*) to offer require some reconstruction.

Efforts at reconstructing the philosophical foundations of OT have been the focus of much discourse in the field of occupational therapy over the past few decades (Brachtesende, 2005; Fisher, 1998; Friedland, 1998; Hasselkus, 2001; Kielhofner, 2004; Law, Polatajko, Baptiste, & Townsend, 1997; Lee, 2009; Yerxa, 1992), often resulting in support for more ‘occupation-based’ practice. Advancing these attempted resurrections, the present project offers a model and a perspective which suggests moving *from* occupation-based practice toward a broader focus on occupational life space. The suggested perspective is informed by conceptions from philosophical anthropology and a view of human biology put forth in Moss’s detachment theory. Bringing occupational therapy under the conceptual regime of philosophical anthropology (Gehlen, 1988; Pavesich, 2008) and human biology according to detachment theory (Moss, 2006; Moss & Pavesich, 2011)

sheds light on the nature of the human situation—that is, the human *need* to create an occupational profile.

Occupational profiles will impact the way in which one experiences life. Different occupational profiles will yield different temporal life structures (e.g. whether one is driven toward shorter or more long-term goals), and personal meaning in one's world will depend largely upon her occupational profile. Occupational choices will impact the degree to which motivation (to engage in occupation) is experienced, and occupations influence one's social situation—that is, the degree to which one is socially interconnected. These aspects of an individual's occupation profile, I argue, have differential relationships to well-being. Thus when a person is experiencing ongoing discord (i.e. occupational maladaptation), it is these factors—temporal structure, motivation, and social interconnection—which provide foci for OT interventions to achieve best outcomes.

Introduction to Chapter One

The purpose of chapter one is to review occupational therapy's relatively brief history—the insights that gave rise to the discipline and the events that gradually divided OT practice from these insights. By recounting this history, I hope to illuminate the fundamental value that lies within the insights had by occupational therapy's founders (more recently re-emphasized in Mary Reilly's research program in the 1970's). In particular, temporal adaptation (Kielhofner, 1977) and intrinsic motivation (Florey, 1969)—two areas that gained significant attention by students of Reilly—are identified as hallmark concepts that can aid in reconstructing OT's original philosophical framework. This reconstruction, when bolstered with insights from philosophical anthropology (Gehlen, in particular) and detachment theory (Moss), informs an occupational model of addiction which is intended for eventual clinical application.

Why do temporal adaptation and intrinsic motivation deserve so much attention?

Motivation and temporal adaptation are central in creating an occupational profile that can influence one's ability to experience a world of personal meaning and satisfaction.

Looking at how occupational engagement can bring sustained meaning to human lives (and what sorts of occupations fail to do so and why), I argue, is crucial for both understanding addiction (implicated to fall under the latter, parenthetical description) and tapping into the therapeutic power of occupation as a means for treating addiction (when troublesome).

An occupational model of addiction is an invitation to move occupational therapy practice toward addressing questions of motivation and temporal construction of life spaces (in social contexts). This project is in contrast to the practice approach of current occupational therapy, often aimed toward helping individuals participate in occupations via neuromuscular, biomechanical, or function-based remediation or compensatory strategies². Current OT practice via these approaches does not necessarily entail restoring the motivation to participate in the occupation in question, nor does a capacity to engage in an occupation necessarily aid that individual in managing her ongoing life experience over time if she lacks motivation or the will (or ability) to use that occupation and/or others to structure her temporal world.

Chapter one's historical reconstruction of occupational therapy introduces to the reader the therapeutic power of occupation as observed by OT's founders, prior to distortions that, at times, mask this power in today's treatment settings.

Introduction to Chapter Two

The first objective of chapter two is to illustrate flaws in current conceptualizations of addiction from which unsubstantiated findings have prolifically emerged. The absence

² Common intervention methods for current OT practice

of the term ‘addiction’ in the DSM-IV-TR (APA, 2000) is discussed, and I examine how criteria for substance disorders are put together in an ad hoc manner to bolster various definitions of addiction created for the purpose of further researching the phenomenon. Findings, which mirror the conceptual criteria derived to make the study possible, expand the now widely accepted notion that addiction is a neurobiological disorder. The pervasiveness of the notion that addiction is a neurobiological disorder is evident in a literature review of addiction research over the past decade. In this chapter I review the 2006 compilation of research articles on addiction (Madras et al., 2006) in order to address some of the fundamental ideas emerging from these neurobiological studies, and in order to illuminate some of their shortcomings.

The claim that addiction is a brain disorder implies that addicts irrationally pursue an activity (the activity to which they are addicted), and that their irrational behavior is the product of neurological factors such as neurochemistry or neurobiological structures (e.g. neuronal pathways). I scrutinize the view that addiction is a brain disorder, and instead suggest addiction to be a rational (albeit potentially harmful) response to an already present human need. The *need* that addicts are responding to by engaging in their addictions is the same need, I argue, that all humans are responding to when they engage in occupations—the need for meaningful, life-organizing activity.

This brings me to the second main objective of chapter two—to illuminate the immensity of the human need for occupation. The role of occupation in human lives is portrayed as analogous to the role of instincts in the lives of other organisms. This analogy stems from observations that the human organism, biologically, has instinctual deficits (Moss, 2006; Moss & Pavesich, 2011) that are compensated for through occupational engagement. I argue from the biological perspective of Moss’s detachment theory and the philosophical anthropological perspective of Gehlen (Gehlen, 1988) that enculturation into

human (social) environments via the creation of occupational profiles gives rise to ways of being that are experienced as obligatory, necessary, even unavoidable at times.

Occupations from this perspective are a response to the human need for self-creation that exists because of biological instinctual deficits. Human beings are born exceedingly vulnerable, without a defined life course aside from that laid out by culture and occupation.

An occupational model of addiction views addiction as one of many occupational endeavors that is sought to deal with this situation of being human.

Introduction to Chapter Three

‘Addiction’ has been deemed a major human and public health problem. For instance, it is documented that as many as 74 percent of Americans have been negatively impacted by addiction to alcohol (SAMHSA, 2007), and substance abuse diagnosis (commonly conflated with research definitions of addiction) accounts for 25 percent of all United States community hospital stays (7.6 million stays) (Agency for Healthcare Research & Quality). Addiction research projects are geared toward solving the *problem* of addiction, and the definition(s) of addiction they employ carry negative connotations. By contrast, occupations (as the conceptual and philosophical basis of occupational therapy) carry positive connotations. By suggesting addiction to be an occupation under the occupational model of addiction, I have challenged the usual normative distinctions that separate addiction and occupation.

The term addiction, it has been argued, was originally derived from the Latin verb *addicere*, and defined in the 1884 *Oxford English Dictionary* as servitude, either to a slave master (in cases where one was delivered or given over by sentence of court), or to a habit or pursuit (Alexander, 2008). Addiction *could* refer to drug use, but it could also be used to refer to devotion “to a worthy cause or a benevolent god [and could] be the foundation of

a positive, fulfilling life” (p. 28). The value distinction depended on one’s personal beliefs regarding virtuous versus harmful activities.

In contrast to the 1884 definition, more recent definitions of addiction link it mostly to drug use, and almost definitively to harm. These definitions that emphasize drug use and harm both inform and are reinforced by studies seeking to uncover drug-induced brain changes to account for the ‘harm’. While I do not dismiss the intuition that addiction is potentially harmful, I argue that the normative values that have become inherent in definitions of addiction have been derived in ways that are unsatisfactory. For instance, a large portion of the stigma inherent in ‘addiction’ turns out to be the product of unequivocally linking addiction to drug use—but not just any drug use (not, for example, anti-depressants, or any other drugs promoted by the pharmaceutical industry). In particular, addiction is linked with use of drugs that have been demonized because of their presence in the cultures of marginalized racial groups (Acker, 2010). Thus chapter three begins with a brief overview of literature exposing the origin of negative stigmas attached to addiction (originating, of course, from negative stigmas attached to certain drugs).

After this review, chapter three emphasizes my argument against the brain disorder conception of addiction. The brain disorder perspective ascribes negative value to addiction by accepting inherent stigmas linked to drug use and expanding them to make normative claims about micro level factors such as particular neurobiological states or structures. The normative value ascribed to neurological structures rests on the basis that drug-induced brain changes cause continual compulsive drug use (i.e. the ‘harmful’ behavior of a drug addict). Through a review of literature from the 2010 “Addiction” issue of *BioSocieties*, I highlight that drug use in and of itself does not inevitably lead to the proposed disordered ‘addiction’ brain state and pathological behavior. Therefore, I argue against ascribing normative value at the neurobiological level. It may be the case that drug

use will be destructive, but this, I argue, is not because of some inherent property of the drug. Instead, I argue that the potential for drug use to be harmful comes when drug use is made an occupation for an individual. Having the status of an occupation means that an activity is central and defining for that individual. By contrast, drug use, when *not* an occupation can, in fact, coincide with health (as in Keane and Hamill's (2010) example of narcotic pain management). Chapter three concludes, therefore, that normative value should only be assigned at the level of human occupation.

In this chapter, however, I avoid making specific claims about various occupations as intrinsically valuable or problematic because the value of an occupation is always embedded in a socio-cultural, environmental context. Instead, I delineate the appropriate level at which normative assessments should be made (the level of human occupation), and then introduce the concept of focused flexibility as a framework for scaling the value of one occupation versus another with respect to human health and well-being.

I suggest that the concept of focused flexibility can be helpful in contextualizing neurobiological research findings regarding addiction within the framework of an occupational model. So while opposed to the brain disorder conceptual model of addiction, I avail myself of insights/resources emerging from pertinent, molecular-level scientific studies. I suggest a specific conceptual framework through which these micro-level findings can be understood and interpreted. I examine some key findings in the neurobiology of addiction and discuss how they might be understood in the context of focused flexibility.

Introduction to Chapter Four

In chapter four I describe the method and findings of a qualitative study I completed in order to examine the validity of an occupational model of addiction. In the study "Is

Addiction an Occupation?” I observed whether an occupational model of addiction actually described the experience of addicts. The study was undertaken in order to determine whether further examination of how to employ such a model is warranted.

Ten putative addicts participated in semi-structured interviews. Interview questions inquired about the ways in which addicts experienced their addiction(s). A constructivist grounded theory approach was used to analyze emerging data, which was then discussed in relation to Kielhofner’s (2008) Model of Human Occupation. Participant responses gave rise to seven themes: connection, locus of control, habituation, identity, escape/coping, motivation, and penetration. An overarching emergent theme reflected addiction to be an attempt by the individual to create a cohesive existence given her particular circumstances. Kielhofner’s tenets of human occupation, volition and habituation, emerged directly from the data. Overall, data provided evidence supporting the notion that addiction is experienced as an occupation. I concluded that the study’s findings support the relevance, validity, and potential usefulness of an occupational model of addiction.

Based on the data collected, addiction appears to be an occupation with some specific qualities. In particular, the occupation of addiction, even if initially engaged in to promote social connection, appears to correlate with an experience of deeply felt isolation.

In the second half of chapter four I pinpoint ‘felt isolation’ as a key identifier linking addiction to harm. I review the generally accepted correlation between isolation and poor health. I then use the concept of focused flexibility, introduced in chapter three, as a proxy for making normative assessments; that is, I use focused flexibility as a measure of the degree to which an occupation can foster human well-being. As introduced in chapter three, focused flexibility delineates a conceptual spectrum on which we can contextualize occupations in relation to their consequences for human lives. On one end of the spectrum lie occupations to which one is very loosely attached. These are occupations

that have little impact on identity and life choices, and are easily set aside. They also may be insufficient detachment compensations; that is, they alone may not provide the focus that humans seek and in fact require from occupations. On the other end of the spectrum lie occupations to which one is seemingly irrevocably attached. These occupations have enormous consequences for human lives, often produce rigid occupational profiles, and are highly defining; that is, they provide stringent guidelines regarding what one can and cannot do. ‘Addiction-occupations’, I suggest, fall on this end of the focused flexibility spectrum.

Addiction-occupations, I argue, are isolating *because* they are on this stringent end of the focused flexibility spectrum. Human sociality and connectedness, I argue, require a degree of flexibility and openness, thus addiction-occupations either preclude socially-embedded occupational endeavors and their concomitant social connectedness, or an individual engages in addiction-occupations to compensate for an already-present lack of socially-embedded occupational structure (and social inter-connectedness). While the etiological arrow may point in either direction, a connection between addiction and felt isolation (and a connection between recovery from addiction and social interconnection) is observable in the data collected in “Is Addiction an Occupation” as well as in literature on addiction. Alexander’s dislocation theory of addiction, which also emphasizes the connection between addiction and isolation (dislocation, in his terms) is discussed.

This project is dedicated to exploring the best conceptual attitudes for gaining insight into the nature of addiction. My exploration is one which draws from a view of human nature put forth by philosophical anthropologists in the early twentieth century—a view that has been underutilized in therapeutic practices (particularly occupational therapy)

aimed at treating human problems. Through an emphasis on the philosophical anthropological view described in this project, addiction, I argue, is better understood. And with better understanding comes increased awareness of how we might re-direct and/or eliminate what has become an internationally identified human and societal problem.

Chapter One History and Philosophical Foundations of Occupational Therapy

Introduction

Occupational therapy (OT) was founded near the start of the twentieth century. Throughout its relatively brief history, the concept of occupation has undergone a number of transitions (Kielhofner, 2004; Law et al., 1997; Levine, 1987; Low, 1992; Meyer, 1922; Moorhead, 1969; Pierce, 2001b; Shannon, 1977). While OT was founded on multiple observations that occupation proved to be therapeutic in human lives, developing OT into a clinical practice with academic training required an explanation of *why* occupation was therapeutic, and *how* therapeutic gains were elicited (Crepeau, Cohn, & Boyt Schell, 2009). In other words, the therapeutic power of occupation needed to be broken down into a logical, linear story that could be formalized and reproduced with supporting evidence of positive outcomes. To answer such questions, the profession turned to the deterministic conceptual framework of the medical sciences (Friedland, 1998). The impact of the medical model resulted in OT distancing itself from its philosophical foundations³, thus OT became a discipline severed from any firm, conceptual roots (Shannon, 1977). Since the influence of the medical model took hold, scholars and clinicians have continually lamented the increasing disconnect between OT practice and the conceptual foundations it stemmed from (Brachtesende, 2005; Bruce & Borg, 2002; Hasselkus, 2001; Shannon, 1977).

In this chapter, I will recount the history of OT—both the birth of its conceptual foundations as well as developments and diversions from these foundations. Examining the history and developments that occurred within OT serves two purposes. First, doing so

³ OT was actually founded by dissenters from the medical model as a conceptual alternative

illustrates the need and demand for a conceptual re-grounding in the field of OT. Second, it serves the larger aim of this project, which is to bridge philosophical anthropological insights with the concept of human occupation to inform a (re-) conceptualization of addiction. Recounting OT's history addresses the latter goal by providing a picture of "occupation" as the concept was originally intended by the founders of OT, and providing a window into the insights these founders had regarding human health and the role of occupation.

Foundations

Occupational therapy (OT) was founded on a firm belief that occupation provided a remarkably powerful therapeutic tool for the mental well-being of humans. The notion that occupation was a valuable therapeutic tool was not in question when the field of OT began to form. Occupation was the core concept that unified a diversely educated group of individuals who each believed that through "*systematic engagement of interest, and concern about the actual use of TIME and work*" (Meyer 1922, p. 4, original caps and italics), patients with grave mental disorders could be restored to sanity.

This focus on mental disorders was short-lived. Although it was in the area of mental health that the value of occupation was first discovered, soon thereafter it was realized that the scope of occupation as therapy extended far beyond the rehabilitation of mental ailments. A mark of this extension occurred when George Edward Barton, an architect who hosted the founding meeting of OT, came to appreciate the therapeutic value of occupation when he took on the challenge of curing himself of tuberculosis and paralysis. Affirmed by the results of his own efforts using occupation, Barton commemorated his recovery by creating The Consolation House in Clifton Springs, New York—a recovery center for individuals aiming to rehabilitate themselves through occupation (Crepeau et al., 2009). Four others (William Rush Dunton Jr., Eleanor Clarke

Slagle, Susan Cox Johnson, and Thomas Bessell Kidner), who somewhat independently came to believe in the power of occupation, joined Barton in Clifton Springs at the founding meeting that gave rise to the National Society for the Promotion of Occupational Therapy (NSPOT) in 1917, now the American Occupational Therapy Association (AOTA) (Crepeau et al., 2009)⁴.

What is Occupation?

While most commonly used to refer to vocation, occupation in the context of occupational therapy literature has a much broader meaning with implications for human life that far surpass the mere role of employed work and vocational duties. With attention brought to the term through occupational therapy, occupation's definition has been broadened to include "daily activities that reflect cultural values, provide structure to living and meaning to individuals...to fulfill their time and give life meaning...mental abilities and skills...*everything people do to occupy themselves*" (Law et al., 1997, p. 32 my emphasis). While this conception of occupation was perhaps clearly understood by OT's founders, it proved to be the subject of much debate as OT continued to grow, perhaps because of the confusion that came from trying to support OT with the conceptual framework of the medical model. Efforts to define occupation, increase public awareness of the role of occupational therapy in rehabilitation, and illuminate the importance of occupation in human lives exploded, especially throughout the twentieth century, primarily by occupational therapists in the interest of protecting occupational therapy from becoming obsolete or usurped by other rehabilitative practices such as physical therapy (which had become a very real threat when the therapeutic power of occupation was diluted). While

⁴ Other key contributors to the development of OT who were not at this initial meeting include (among others) Adolph Meyer, Mary Potter Brooks Meyer, Herbert J. Hall, and Julia Lathrop (Crepeau et al., 2009)

this had not always been a concern, especially during occupational therapy's founding years, the field has undergone changes resulting in evolving conceptions of occupation. Thus questions have arisen regarding occupation's power and potential as a therapeutic tool as well as the ways in which occupation can and should be used.

In the 1890's, Adolph Meyer presented his first medical paper to the Chicago Pathological society in which he drew attention to the use of occupation in the treatment of American psychiatric patients (Meyer, 1922). Meyer's interest in the use of occupation as therapy demonstrated his dissent from the predominate views held by physicians, both then and now, that "the art of medicine consisted mainly in diagnosing more or less mysterious diseases and 'prescribing' for them...[that each] disease was supposed to have its program of treatment, and...the patient and the family expect a set of medicines and a diet, and a change of climate if necessary, or at least a rest-cure so as to fight and conquer 'the disease'" (Meyer 1922, p. 1). In contrast to these views, Meyer claimed that illness should be conceptualized as more than a localized bit of physiology-gone-wrong. Illnesses were problems that had to do with the entire human organism in a specific context. Occupation was curative because it treated illness as something having to do with the entire patient in her environment. Occupational therapy required not merely getting rid of some disturbance so the patient could resume her previous lifestyle, but rather called for rehabilitation of the whole, environmentally-embedded patient. What Meyer sought to convey radically opposed views held in the medical sciences which suggested diseases to be local, identifiable physiological mechanisms. So from the outset, occupational therapy stood as an alternative to practices which believed that disease existed as something separate and extricable from the patient. Meyer suggested instead that "many of these formidable diseases are largely problems of *adaptation* and not some mysterious devil in disguise to be exorcised," (p. 1, my emphasis) proposing "the value of work as a sovereign

help in the problems of adaptation” (p. 4). Implied is that, in order to be disease-free, the human organism, embedded in an environmental context, must be skillfully adapted so as to meet and match the needs required within the being’s present situation at any given time. Meyer suggested that the way to achieve this sort of healthy, attuned state is, quite simply, through work.

Occupation in Psychiatry

Although highly controversial and unwarranted in some cases,⁵ Meyer’s views regarding the therapeutic value of occupation were not unfounded. In particular, psychiatric illnesses posed exceptionally complicated symptoms which proved difficult if not impossible to pin down to specific and identifiable physiological defects. For this reason, traditional medical approaches found little success in the realm of psychiatric dysfunction while occupational therapy proved to be invaluable (Levine, 1987).

Occupational approaches to the treatment of severe mental illness have proved to be successful since the beginning of the nineteenth century. European mental institutions, for example, demonstrated remarkable success using occupation as a substitute for restraint (Meyer 1922). Patients strapped to their beds lest they present a danger to the lives of those around them were rehabilitated through occupational engagement such as participation in art projects or gardening. As a result of occupational therapy, patients began to demonstrate more self-control. They were able to maintain safe boundaries and avoid being constantly restrained. In short, they were able to act in ways that they were unable to act in prior to exposure to the therapeutic use of occupation (Meyer, 1922).

The success that occupation brought about in treating mental health patients was demonstrated repeatedly during the late 1890’s and early twentieth century. Occupational

⁵ e.g. germ theory advocating antibiotics

therapy's founders were therefore familiar with and convinced by the value of occupation; among them there appeared to be little concern of occupational therapy being or becoming obsolete (Bruce & Borg, 2002; Crepeau et al., 2009; Kielhofner, 2004; Meyer, 1922; Moorhead, 1969). Hence, upon reviewing the literature it seems that they sought not to define and defend occupation as a concept so much as to lay the groundwork for putting its use as therapy into practice (e.g. Levine, 1987; Low, 1992; Meyer, 1922).

Laying Foundations for Clinical Practice

Adolf Meyer collaborated with social worker and civic activist Julia Lathrop to initiate the use of arts and crafts in treating the chronically mentally ill at an institution in Chicago, again demonstrating that, as Meyer put it, "The proper use of time in some helpful and gratifying activity appeared...a fundamental issue in the treatment of any neuropsychiatric patient" (Meyer 1922, p. 4). Where medical approaches to rehabilitating or curing these patients yielded few to no recoveries and required ongoing sedation and inhumane treatment, occupational approaches integrated into these same patients' lives structured experiences common and necessary to human life, concurrently eliminating unsafe emotional and physical outbursts (Meyer, 1922).

Physician Herbert J. Hall was another key contributor in laying the foundations for OT practice. Like Meyer and others involved in promoting OT, Hall disagreed with the existing widespread acceptance of the medical model of disease and illness. Hall underscored the medical model's limitations, specifically in addressing conditions such as neurasthenia (Levine, 1987). Mostly identified in middle- and upper class individuals, the symptoms of neurasthenia, including "morbid anxiety, unaccountable fatigue, irrational fears, and compulsive or inadequate sexual behavior" (p. 249) were not easily reducible to the physiological mechanisms of the medical model. The common prescription from physicians for neurasthenics was bed rest, which yielded few recoveries (Levine, 1987).

Hall revolutionized the treatment of these individuals through the use of occupation. He developed a sanatorium in Massachusetts where he put to use his newly developed “work cure” (Levine, 1987). It was apparent from these initial programs that engaging in structured activity helped to restructure and reform psychological phenomena; one could affect mental processes through occupational engagement.

Occupational therapy gained further recognition and a wider audience when in 1902, physician William Rush Dunton Jr. was appointed supervisor of Sheppard Pratt Asylum’s occupational regime in Maryland where he, too, quickly became convinced of the value of occupation in treating long-term mental health patients. Rush recognized a connection between current occupational approaches in mental health and the humanitarian and moral treatment approaches of the previous century, which suggested the use of occupation to restore mental health to long term patients who were previously viewed as dangerous and incurable (Crepeau et al., 2009). Through numerous publications and presentations expanding this link between previous philosophical ideals and current success in practice, Rush proposed and advocated for widespread implementation and development of the practice of occupational therapy (Crepeau, Cohn, & Boyt Schell, 2003, p. 9).

Evidence of the success of occupation as therapy continued to proliferate. In the 1920’s, welfare worker Eleanor Clarke Slagle introduced habit training at Phipps Clinic, an institution for the severely mentally disabled. She assigned structured, purposeful tasks to patients assumed to be severely ill for life, and they got better (Crepeau et al., 2009). Social worker Mary Potter Brooks Meyer (wife of Adolph Meyer) developed a similar program implementing occupation as a treatment for psychiatric ward patients (Levine, 1987), offering still more evidence validating the use of occupation as therapy. Similar efforts were seen in the work of Susan Cox Johnson who, through her own experiences as

an arts and crafts teacher, strongly believed in the use of handcrafts as a means for gaining or regaining self-confidence by redirecting thoughts away from disability and instead focusing them toward a unified objective that requires mental concentration and the use of one's hands (Crepeau et al., 2009). These individuals laid the groundwork for a unified therapeutic practice utilizing occupation as a primary tool for rehabilitation.

During these founding years, an awareness of the impact of occupation on the severely mentally ill had profound implications that kept occupation a central philosophical theme, guiding therapeutic practice. The core principles and aims of OT, however, very subtly and seemingly harmlessly began to shift.

Developments in OT: Diversions from Occupation

A Reductionist Approach to Dysfunction

Occupational therapy came about because of the recognition that occupation was a fundamental component of healthy human lives. Dysfunction (manifested in a wide variety of ways) was seen as resulting from lack of engagement in occupation. Restoring or introducing occupation served to eliminate dysfunction. However, shortly after OT started to gain recognition, the scope of its practice and the meaning of occupation began to change (Shannon, 1977). At first, changes seemed to occur as the result of simple misinterpretations—statements concerning the goals of the profession, at times, confused the fundamentals of occupational therapy. For example, in one instance Meyer himself stated the goal of occupational therapy to be to “obtain performance wherever it had failed” (Meyer 1922, p. 6), noting that occupational therapists accomplished this through the use of structured, purposeful projects. When emphasis was placed on failed performance, as could be interpreted to be the case in the above statement, attention became increasingly focused toward identification of a specific injury in order to isolate and treat it.

As a consequence of this focus on failed function, a divide became apparent between occupation as, on the one hand, directly curative to the human organism versus on the other hand, a tool that was useful in restoring particular biomechanical functions. The latter became common, and the role of OT began to appear as similar to the role of all rehabilitation and medical sciences—to fix broken parts. The only difference was that OTs used occupations as rehabilitative tools where physical therapists (for example) used rote exercise and physicians (perhaps) used a combination of exercises, medications, and surgeries. This use of occupation as a rehabilitative tool for addressing localized defects marked a divergence from OT as developed by its founders. Originally, OT sought not to sneak in biomechanical rehabilitation through fun activities (occupations), but rather to use occupation as a means of structuring human lives because the human condition required this structuring to flourish—mentally, socially, and biologically.

A Distinct Discipline?

Prior to this divide, occupational therapists did not view humans as composed of component parts which, if all functioning well, would present a healthy occupational being. Initially, occupational therapy was different from most disciplines because of its emphasis on the irreducibility of the human organism and its direct use of occupation to instantiate healing. It was their recognition of the irreducibility of the human organism when conceptualizing certain disorders that uniquely qualified occupational therapists to deal with those individuals who did not benefit from more traditional intervention approaches. Some patients, for instance, were clearly in a state of compromised health, but when specific parts of these individuals were identified as causes of the problem and treated, the individuals were still unwell. Others were ill with no apparent localizable component causing the symptoms. It was in both of these cases that occupational engagement could

restore or initiate health despite either 1) the presence of a suspected local cause whose manipulation did not bring results, or 2) the lack of a localized cause altogether. So the problem that occurred as occupational therapy evolved was the emerging focus on localized components and their relationship to specific dysfunctions. This focus took away occupational therapists' unique and valuable place among the rehabilitation and medical sciences.

In the face of this shift, occupational therapists tried to maintain their identity by uniting themselves in the belief that occupational activity outside the therapeutic setting was the ultimate goal of practice. Occupational therapists were distinct because of the emphasis they placed on the importance of restoring humans to their occupations. Occupations were considered to be an integral component of human health. But merely having a belief that occupation was important for human life was not enough to warrant a unique therapeutic discipline. Undoubtedly, this belief was held by all or most healthcare professionals, including physicians and physical therapists. All health care professionals concerned themselves with removing disturbances in order to allow the individual to return to occupations of daily living.

Additional Questions

That restoration of particular biomechanical function was geared toward returning humans to their occupational lives raises some additional questions: what was meant by occupational life? Were some occupations more valued than others and therefore more often the goals of therapy than others? Or was occupation viewed in a broader sense as human action which, regardless of its type, was health promoting? To what extent did economic participation direct occupational rehabilitation? Was the 'success' of rehabilitation scaled in terms of whether the individual was able to resume his or her life as a functional economic being? For instance, in the 1940's when occupational therapists

treated wounded soldiers using group activities such as basket weaving, were they aiming to cure soldiers from the distress and physical injuries of the war, or were they trying to teach the soldiers certain skills while rehabilitating fine motor control that was perhaps compromised by injury in order for them to return to society and find roles in the work force, i.e. become productive components of an industrial economy? Put simply, was occupational therapy seen as directly healing through the naturally restorative effects occupation had on the human organism or was it a bridge to restoring economic agents?

These are important questions which deserve further attention in later sections. Presently, the point to be underscored is that, whether a bridge to economic participation or not, as occupational therapy came to focus on rehabilitating specific dysfunctions, it naturally created an intermediate step between therapy and occupation. It came to be the case that most often, occupational therapy was viewed as a bridge toward the ability to independently participate in occupational activity outside the therapeutic setting. In creating this intermediate step, occupational therapy came to resemble other rehabilitative and medical practices.

Shifting attitudes illustrated that, although unique in that occupations were the rehabilitation tool, occupational therapy's main concern lay in restoring function to specific, maladapted or injured parts. With that being the case, occupational therapy came to share goals with other medical professionals who were perhaps more qualified to meet those goals. Additionally, by diverging from its foundations, OT now faced the same difficulties and limitations that challenged other disciplines when trying to address complex human phenomena that do not reduce well to recognizable biomechanical or physiological mechanisms. This perhaps unintentional shift put occupational therapy at risk of becoming obsolete if it could not prove that purposeful activity (occupation) served as a more

effective measure for restoring function than, say, medications and exercise regimes provided by physicians or physical therapists.

Responding to Changes: Further Developments in OT

Responses to the growing concern that occupational therapy was becoming obsolete exploded, but most sought to bolster occupational therapy's status by making it more measurable, more objective, more like other medical approaches (Shannon, 1977). Perhaps inevitably, the influences of biomechanics and pressure to conform to hard, scientific practice led occupational therapy to become increasingly difficult to differentiate from physical and other rehabilitative therapies. Moving away from its theoretical foundations, OT quickly became uprooted in an effort to situate itself amongst rapid advancements in the medical sciences.

Building a Curriculum

The means by which OT grew and gained both public recognition and acknowledgment within the medical professional sector sheds light on some of the reasons the profession strayed from its original philosophical stance. In the 1920's, establishing OT as a legitimate profession meant translating the philosophical insights of its founders into academic material that could be taught to prospective occupational therapists. Ironically, the medical sciences were granted authority in shaping OT into what could be considered a 'viable medical profession' (Crepeau et al., 2009), despite the fact that the founders of occupational therapy were dissenters from the medical model. As already noted, occupational therapy was created as an alternative to the more traditional approach offered in other disciplines—the views held by medical professionals were exactly what occupational therapy was meant to oppose. The very system which occupational therapy defined itself against had become the guiding framework for developing the field.

In 1923, the “Essentials” were formed as the first educational standards for training new OTs. The one-year curriculum included courses in general medicine and surgery, medical diagnoses and disorders, kinesiology, and anatomy. The educational program also encultured students via information about types of hospitals, and hospital ethics. Psychology and sociology were minimally emphasized, as was the history and theory of occupational therapy (Crepeau et al., 2009). In 1935, the American Medical Association approved the first revision of the Essentials in which neurology, physiology, and psychiatry were added, while the liberal arts and humanities courses were completely eliminated, not to be reincorporated until 1967 (Crepeau et al., 2009).

Gaining Public Awareness

Additionally, occupational therapy practice was growing in the public eye as a successful means for treating various illnesses, but reasons for its success were misrepresented. For instance, the expansion of OT practice is largely due to the success of the reconstruction aides of World War I (Low, 1992). Reconstruction aides were civilian women appointed by the War Department to offer therapy in military hospitals. A reconstruction aide provided either physiotherapy, which consisted of massage and exercise therapy, or occupational therapy, which consisted of the use of simple hand crafts to treat patients in orthopedic and surgical wards and/or those suffering from nervous or mental diseases (Low, 1992). Occupational therapy aides aimed to “stimulate [patients’] interest and make them forget [trauma]” (Meyer, 1948, p. 212, in Low, 1992, p. 39) through the use of activities that encouraged creative self-expression and self-forgetfulness such as basketry, weaving, wood carving, block-printing, knitting, and needlework. The recovery rate of soldiers treated by occupational therapy aides was so impressive that in 1918 the Medical Department called for more trained occupational therapists to “furnish forms of

occupation to convalescents in long illness and to give to patients the therapeutic benefit of activity” (Medical Department, 1918, p. 1, in Low, 1992, p. 39). The use of occupation proved helpful, but reasons for its success were misunderstood. OT was seen as successful because, as stated in Colonel Frank Billings’s speech to the Institute of Medicine in Chicago in 1919, “the work served as a diversion by arousing the interest of the patient and by distracting him from a contemplation of his disabled condition, whether due to sickness or injury” (Billings, 1919, p. 1509, in Low, 1992, p. 40).

Within the field, some OTs were underwhelmed with the conflation of occupation and mere diversional activity, but reconstruction occupational therapy aides were teachers, artists, and craft workers. They did not come from a medical background and therefore lacked influence and credibility when it came to academic discussions of treatment benefits. Therefore, in voicing their dismay they turned to the medical model and its supporting professionals for ways to bolster the importance of occupation. They relied on physicians and other medical professionals to provide the authoritative stance as to whether and how an activity was to provide curative benefits to the patient in question. So while occupational therapy reconstruction aides helped publicize the therapeutic value of occupation through their work, they simultaneously contributed to the confusion surrounding occupation and its role in therapy by inviting increased influence from medical ideals.

OTs were right to argue that occupation’s success as a therapeutic tool did not lie in its use as a diversion tactic—that its implementation was much more than a mere distraction from morbid reflection about one’s ails—but looking to medical professionals to provide the voice of authority proved to be a horrible way to argue their case, as will be seen with the unfolding developments of OT to come.

Low points out, “The assumption of power by the surgeons...may well have served to shift the orientation of the reconstruction aides and subsequently the occupational therapists toward the medical model” (Low, 1992, p. 42). Due to this sustained shift, a true understanding of 1) the benefits and necessity of occupational performance for human beings and 2) an appreciation for the value of gearing treatment toward occupation rather than elimination of disease were absent. These two crucial components which distinguished occupational therapy and fostered its original foundation went unappreciated. Already in 1920, a mere three years after NSPOT was founded, a clear understanding of the meaning of occupation in the context of human health and well being was missing from those putting OT into practice.

Misconceptions Continued

Treatments of soldiers during World War I brought muscle function to the forefront of occupational therapy concerns, which added to the confusion around the concept of occupation as a therapeutic tool. In what came to be referred to as functional therapy practice, occupational therapists were encouraged to focus on kinesiology and measurements of available movement. Treatments for muscle dysfunction required the implementation of exercises that made use of the disabled part(s) of patients. This drastically changed the focus of OT practice, gearing it more toward the aims generally set by the other medical professions. At the time, OT treatment had to be prescribed by a medical professional, so the continuing shift toward medical ideals was not particularly surprising. Because OT practice was only used in response to specific prescriptions, services provided by occupational therapists were highly focused on meeting the goals set out by the prescribing physician.

With OT's philosophical foundations at bay and such strong influences coming from the medical sciences, the profession continued to move toward the ideals held by those whose authority guided their practice. The adapting views of occupational therapists as they continually attempted to accommodate attitudes of the medical model are evident in expressions such as that of Susana Llorens in Andrea Brachtesende's "Perspectives on the Profession," published in the *American Journal of Occupational Therapy* in 2005. Llorens proclaims that "today the field is more science-based, and that's a good thing...practice is more professional now...we...evaluate for specific conditions and deficiencies and such (Brachtesende, 2005, p. 16). The conceptual shift is evident; where OT was founded on an intuition that human ailments are often adaptive deficiencies which find the most efficient treatment in occupational activity serving to rehabilitate an individual within the context of his or her life experiences, through strong influences from other medical professions OT practice had become an effort at identifying 'specific conditions and deficiencies' to be isolated and adjusted so as to eliminate the problem. This shift couldn't be further from what Hall and others had envisioned when they dissented from similar approaches purported by the medical model. In Judith Friedland's words, "the shift in focus for occupational therapy [changed] from occupation as a means of developing or maintaining health to occupation as a means of enhancing medical outcomes..." (Friedland, 1998, p. 377).

OT Terminology

World War II marked the development of practice concepts in occupational therapy. For example, specific procedures that had originally been used to treat children with physical handicaps were abstracted and generalized into interventions that could be geared toward rehabilitating disabled soldiers. The process of abstracting specific procedures and making them useful in treating a wide range of patients with various disabilities created

within OT some standards of practice. Focuses of intervention that became specific to OT began to emerge, helping to define both its scope of practice and its distinctive features. An example is ‘activities of daily living’ (ADLs), which are prized as a main component of standardized OT practice, and a central focus of intervention (AOTA, 2002).

Increasing cases of persons diagnosed with polio as well as children with cerebral palsy being treated by OTs brought another hallmark of OT into focus—independence (Friedland, 1998). Interventions focused on improving the performance of ADLs so that persons inflicted with these disabling conditions could once again function independently. The result—viewing independence or the ability to perform ADLs such as dressing oneself as ends in themselves and the ultimate goals of therapy—however, was minimally beneficial. This topic will be addressed in more detail shortly.

Functional Therapy and the Problem of Reduction

By the 1940’s, while OT was still recognized for its success in treating patients that were hospitalized long-term (primarily those with psychiatric disorders), functional therapy for patients with orthopedic dysfunction had become nearly as common (Brachtesende, 2005). Occupational therapists attempted to maintain their identity by constructing rehabilitative exercises that were occupational in nature to distinguish themselves from physical therapists. For example, exercises for rehabilitating the elbow included wood-working projects requiring a hammer. Where originally occupation had been the means and healthy human experience the ends, in functional therapy “[t]he activity had become the means, and improving joint range, muscle strength, and motor skill the end” (Friedland, 1998, p. 377).

There were a number of reasons why the incorporation of functional therapy and the shift in focus increasingly toward reductionistic, biomechanical goals compromised the

power that occupation could offer in difficult-to-treat human illnesses. For instance, once a particular disturbance was removed and normal functioning made possible, patients did not always resume normal functioning; just because an individual *could* act did not mean she *would*. OT initially had the potential to be unique in that it aimed to restore occupation, which, because irreducible from human experience, included within its definition things like volition, will, and motivation. As Pierce stated, “It is not within an abstract space, but within a familiar and experientially patterned place that humans engage in most of their occupations. Using the spatial dimension to enhance the intactness of occupation-based intervention requires the therapist to comprehend spatial experience from the client’s perspective” (Pierce, 2001b, p. 254). This experience includes all of those internal components, mental and otherwise, contributing to the occupation in question. As Meyer put it,

Our body is not merely so many pounds of flesh and bone figuring as a machine, with an abstract mind or soul added to it. It is throughout a live organism pulsating with its rhythm of rest and activity, beating time (as we might say) in ever so many ways, most readily intelligible and in the full bloom of its nature when it feels itself as one of those great self-guiding *energy-transformers* which constitute the real world of living beings. Our conception of man is that of an organism that maintains and balances itself in the world of reality and actuality by being in active life and active use, i.e., using and living and acting its *time* in harmony with its own nature and the nature about it. It is the *use* that we make of ourselves that gives the ultimate stamp to our every organ (Meyer 1922, p. 5, original italics).

Put simply, occupational therapy was designed specifically *not* to bifurcate bodily function and human will/motivation/etc. By keeping the two as an irreducible whole, and using the term occupation to describe human action, occupational therapy provided means for restoring everything that went into human occupation, including (perhaps most importantly) those mental aspects that contributed to healthy functioning and well-being. The potential for OT as laid out by its founders was enormous, but diversions from the

original intentions that went into bringing occupation to the forefront of therapeutic treatment of human beings threatened both the autonomy and power of occupational therapy practice.

Positing Solutions

OT continued to be influenced by the medical model in both educational training and practical application, and continued to face the risk of being eliminated as a professional therapeutic practice. Woodside notes, “other professions are rapidly absorbing our body of knowledge, they appear to the public to be offering the same services that we offer, and they are selling their programs to other professionals and the public more effectively than we are” (Crepeau et al., 2003, p. 9). Because occupational therapists had moved toward the approaches and applications of other specialists such as physical therapists, it was increasingly difficult to differentiate them as offering something unique. Furthermore, their body of knowledge incorporated less about occupation and had more to do with biomechanics and physiological functioning of the body. These subjects were undoubtedly important for the occupational therapist, but other professionals had knowledge of these same subjects, and to a greater extent.

What was needed was an understanding of the philosophical implications that occupation had for the human organism. Forming a strong, occupation-centered conceptual basis upon which to interpret new information about the biology of the human organism would grant occupational therapists the distinction they needed to avoid losing their identity and any merit occupational therapy once had to exist as its own profession.

A turning point occurred in the late 1960’s at the University of Southern California when Mary Reilly outlined a program of research that would focus on occupational behavior (Crepeau et al., 2003, p. 19). Expounding what was meant by occupational

behavior, Reilly and a number of her students researched those factors which they believed affected the development of the capacity to engage in “productive work and social relationships” (p. 19), two tenets considered to be essential in healthy adult human lives. Motivational dynamics and the use of time, or ‘temporal adaptation’ (Kielhofner, 1977), received the most attention.

A closer examination of the expanding body of work coming from Reilly and her students illustrates that this group of researchers possessed a keen understanding of what was meant by occupational therapy’s founders when applying the term occupation in therapeutic practice. Their efforts in the late sixties and throughout the seventies brought attention back to the central role that occupation has on structuring and maintaining human health and well-being. They accomplished this by offering some central themes that helped to define occupational behavior, which were then demonstrated to be effective means for restoring health through practical, clinical application. Methods for bringing theoretical constructs into practice were provided (Bruce & Borg, 2002; Crepeau et al., 2003; Florey, 1969; Kielhofner, 1977; Shannon, 1977). This newly emerging theoretical backing of OT advanced notions well-understood by OT’s founders, and was a promising effort to re-direct the thinking of many practicing occupational therapists.

Temporal Adaptation

In his 1977 paper, “Temporal Adaptation: A Conceptual Framework for Occupational Therapy”, Gary Kielhofner argued that structured use of time, once appreciated by occupational therapists as central to the task of rehabilitating patients, had lost some much-deserved attention. According to Kielhofner, the meaning of time—of human use and structuring of time—while recognized by OT’s founders as significant, never came to be fully appreciated in OT practice (Kielhofner, 1977). Kielhofner’s work, therefore, aimed to convey the importance of what he called “temporal adaptation” as a

theoretical construct that should guide the application of occupation in the therapeutic realm.

Kielhofner offered specific propositions which illustrated a fundamental relationship between particular kinds of temporal existence and human health and dysfunction. His seven propositions are as follows:

- 1) Each person bears a temporal frame of reference that is culturally constituted
- 2) A unique temporal frame of reference is accumulated through learning and socializing experiences that begin in childhood
- 3) There is a natural temporal order to daily living organized around the life-space activities of self-maintenance, work, and play
- 4) Society requires its members to organize their use of time according to ascribed social roles
- 5) An individual's use of time is a function of internalized values, interests, and goals
- 6) Habits are the basic structures by which daily behavior is ordered in time and psychosocial health is maintained
- 7) Temporal dysfunction may exist in relationship to categories of pathology

(Kielhofner, 1977)

Contextualizing temporal adaptation within the roots of occupational therapy, Kielhofner reminds us of Eleanor Clarke Slagle's use of habit training, in which she implemented activities that introduced the structured use of time, which became "an organizing force on even the most regressed, unmedicated mentally ill patients" (Kielhofner, 1977, p. 236). For Slagle, it was evident that the structured use of time played a significant role in the successful adaptation of human cognitive well-being (Meyer, 1922). Mental health for human beings required a basic structuring of oneself within a temporal construct. What this meant for occupational therapy was that, in Kielhofner's words, "in the richness of man's daily routines and his purposeful use of time, there was both health-maintaining and health-regenerating potential" (Kielhofner, 1977, p. 236). Likewise, the ways in which patients functioned within a temporal framework, the capacity they had to acknowledge and make

use of passing time, revealed to occupational therapists a measure of that individual's health (p. 236).

Broadly speaking, Kielhofner's work therefore provided a conceptual base upon which occupational therapists could measure and differentiate health and dysfunction (p. 236). Temporal adaptation became a core principle within a broad conception of occupation, yet was defined in such a way that it could be used as a specific therapeutic tool for rehabilitation without compromising the initial philosophical ideals of OT.

Assuming the tenets of temporal adaptation, Kielhofner posits temporal dysfunction as the cause of compromised health seen in a wide range of disorders. He provides a number of general examples of how temporal dysfunction could come into play, not just in mental disorders but in all kinds of situations:

The physically disabled person whose self-care has been expanded into a long and tedious procedure, the psychiatric patient whose personal helplessness makes the future an unwelcome burden and the mentally subnormal person for whom the string of events in time seems a jumble...each represent a special difficulty in temporal adaptation (p. 236).

While occupational therapists were certainly acquainted with their patients' difficulties when it came to functional use of time, says Kielhofner, clinical intervention was not geared specifically toward temporal adaptation. He illustrated that factors affecting temporal experiences have implications for health which make clear the relevance and importance of effective temporal adaptation. Kielhofner argued that the many disorders that arose due to temporal dysfunction could be addressed by allocating temporal adaptation as a primary goal of therapy (Kielhofner, 1977).

Furthermore, and perhaps more importantly, a deeper awareness of the impact of time use in human lives could increase the content of concepts and tools already used in OT practice such as the concept of activities of daily living (ADLs). Kielhofner claims that ADLs should have been recognized within a broad, humanistic framework as necessary

components of human life, not merely because they were self-care procedures, but because of the structure and focus they brought to human experience. But because of an impoverished understanding of occupation, specifically regarding the significance of temporal adaptation, he observed that “the concept of activities of daily living [to the practicing occupational therapist] conveys little more than a checklist for self-care” (p. 236). Where ADLs could become a means by which a patient structures the time she is granted in a day, they were instead reduced in significance to represent only the obvious outcomes they brought about; teaching a client to dress herself was seen as a success because the client could then dress herself. By contrast, bringing an awareness of the importance of temporal adaptation to the forefront, teaching a client to dress herself meant providing the patient with a means by which she could structure a particular chunk of ‘life-space’. Dressing oneself might not bring a sense of well-being to a patient who places little value on independence or personal hygiene, but providing a means by which one can structure her time offers an occupational form of healing (Kielhofner, 1977). What is suggested in the notion of ‘occupational healing’ is a belief that the structuring of one’s time in and of itself is so rewarding and beneficial to human beings that it becomes the primary goal of therapy. Dressing oneself independently is an added benefit.

Intrinsic Motivation

Linda Florey, also a student of Reilly, underscored the usefulness of intrinsic motivation theories of behavior as offering another potentially defining core concept for occupational therapy practice that remains true to OT’s philosophical foundations (Florey, 1969). Intrinsic motivation theorists assume that human beings experience satisfaction and reward in activity itself (as opposed to, for example, instinct theorists, who view behavior as the product of instinctual drives toward the pursuit of pleasure found in external

rewards). A general belief that humans will continue to explore, learn, and engage in various forms of action, even when primary drives are satiated, led intrinsic motivation theorists to propose what Robert White called an 'effectance motive' (Florey, 1969, p. 320). The idea, here, is that human beings find gratification in action because it is a means by which they can have an effect in their world. Thus humans find pleasure, even in activities that include pain or struggle, so long as the activities allow the individual to affect things. For the intrinsic theorist, "[r]einforcement does not lie in a piece of candy, a gold star, or a pat on the head, but in the doing or completion of the activity itself" (p. 320). Action is its own reward.

Intrinsic motivation is demonstrated by the child who insists upon feeding himself. Florey quotes White, drawing on the case in which a child reaches an age where he wants to do things himself. White says "'from...the spoon's hazardous journey from dish to mouth we can be sure that the child is not motivated at this point by increased oral gratification. He gets more food by letting mother do it, but by doing it himself he gets more of another kind of satisfaction'" (Florey, 1969, p. 320). The example offers support for the intuition that human action is not merely aimed toward maximal attainment of pleasurable rewards such as food, but rather, that action is something that human beings find rewarding in itself.

Distinguishing Occupation

Both Kielhofner and Florey offer aspects of occupation inherent in all kinds of human activity. Thus the occupational therapist who focuses on Kielhofner's temporal adaptation or Florey's suggested use of intrinsic motivation theory demonstrates a therapeutic practice that is clearly differentiable from physical therapy and other rehabilitative practices. Kielhofner and Florey each provide instructions as to how an

occupational therapist might approach and treat a patient using the framework suggested, temporal adaptation or intrinsic motivation, respectively (Florey, 1969; Kielhofner, 1977).

Kielhofner and Florey's contributions to occupational therapy theory brought to light a contrast between two different ways of practicing occupational therapy. On the one hand, occupational therapists could treat things like independence, basic self-care activities, or desirable degrees of muscle function as ends. The means to achieve these ends could include interventions such as the implementation of graded activities which increased effort demands gradually in order to strengthen muscles and improve a patient's ability to perform a desired activity, such as bathing independently. Assessments included evaluating patients' abilities in their everyday life contexts, manual muscle testing and range of motion measurements, etc. On the other hand, occupational therapists could treat human dysfunction in general as the consequence of either an absence of occupation in an individual's life, or engagement in occupations that are not sufficient to foster that particular individual's well-being. In these cases, the end goal is well-being, and the means, in Kielhofner's approach, consists of addressing the individual's active use of time. Florey's approach might consist of assessing what the individual feels intrinsically motivated to do and whether he or she recognizes the power that engaging in those desired occupations can have for his or her healing.

Resurrecting Philosophical Foundations

Occupational Science

Joining Reilly and her students at USC in the late 1980's, Elizabeth Yerxa established occupational science as a unique academic discipline with its own doctoral degree program (Crepeau et al., 2009) in hopes that OT's philosophical foundations could be resurrected and returned to the forefront of OT practice. Researchers of occupational

science sought to distinguish occupation as different from other ‘types of doing’ by acknowledging occupation as the ‘unit of analysis’ and (purportedly) the central focus for OT practice (Crepeau et al., 2003, p. 15).

Three sub-areas of occupation were suggested as deserving scholarly attention: form, function, and meaning. ‘Occupational forms,’ referred to directly observable aspects of different ways-of-doing, and were exemplified by, for example, the dining styles of various cultures. ‘Occupational function’ examined the effects that occupation had on development, adaptation, health, and well-being. ‘Occupational meaning’ focused on subjective experiences and sought to understand how individuals lived out occupations and formed broader beliefs and understandings of themselves and their lives through engaging in occupation (Crepeau et al., 2003). The attention given to the concept of occupation in occupational science paved the way for more focused research projects examining both the varying effects that occupation in general had for human beings as well as how different kinds of occupations differed in their effects on patients and therefore held implications for occupational therapy practice and theory.

Also directing attention to the concept of occupation, Carlson and Clark extracted from the existing body of OT literature in 2001 five criteria to demarcate occupational kinds of doing from other kinds of doing (Crepeau et al., 2003, p. 16). The five criteria were as follows: Occupations were 1) units with an identifiable start and finish, 2) intentional and consciously executed, 3) meaningful within the context of the person’s life and contributed to his or her identity, 4) somewhere between microbehaviors and global life concerns (somewhere between, for example, scratching an itch and trying to be a democrat) in scope, and 5) labeled by members of the culture (Crepeau et al., 2003, p. 16). These factors served as guidelines for newly emerging research centered on concepts of occupation as a therapeutic tool.

Occupation versus Activity

Despite the huge strides being made in OT research throughout the latter half of the twentieth century and into the twenty-first, a focus on the challenge of defining and validating OT by clarifying what was meant by occupation remained. At the start of the twenty first century, literature was still swarming with articles addressing the question of the meaning and implications of occupation in OT. Doris Pierce, for example, addressed the challenge of making occupational therapy understood by suggesting a need to untangle it from another kind of doing, ‘activity’ (Pierce, 2001b). These two sometimes seemingly synonymous terms, occupation and activity, brought continual misunderstanding and diluted the conceptual and practical power that occupation could have when understood rightly, according to Pierce. Occupation, she says, is “a subjective event in perceived temporal, spatial, and sociocultural conditions that are unique to that one-time occurrence” whereas activities are “more general, descriptive categories whose meanings are culturally shared” (p. 139). Pierce argued that using occupation and activity interchangeably, as is often done, has contributed to misconceptions surrounding OT practice. By defining the ways in which occupation and activity distinctly give meaning to human life, argues Pierce, OT can clarify its unique therapeutic power (Pierce, 2001b).

In Pierce’s terms, when observing or discussing activities, we are generalizing experiences and talking about something impersonal. An individual can be observed to be engaging in the activity of cooking, or playing, for example. But in observing occupation, because of its context-specificity Pierce says “although an occupation can be observed, interpretation of the meaning or emotional content of an occupation by anyone other than the person experiencing it is necessarily inexact” (p. 139). So, in Pierce’s terms, while an activity can be observed and interpreted based on a general set of existing categories, an

occupation cannot be distinguished from its distinct role in the context of the person. To discuss an occupation is to relay a particular life occurrence. Therefore, implementing occupational therapy requires that treatment be deeply subjective and attuned to each individual rather than focused on abstracted, objective goals such as independent dressing, which may or may not be priorities to the patient receiving therapy. The interests and experiences of the patient being treated need to be viewed non-judgmentally, and honored as important. For Pierce, occupations serve the unique role of providing structure and meaning in our lives, and are the only means by which we create ourselves. This aspect of occupation as deeply subjective, she says, is indispensable (Pierce, 2001b).

Pierce's objective is to incorporate within the base definition of occupation the initial philosophical ideals set out in the foundations of OT. By doing so, spreading knowledge of the concept of occupation, she suspected, could simultaneously increase understanding of what can be achieved by OT practice (Pierce, 2001a, 2001b). Occupation becomes understood as that which gives us a personality, a temporally structured mind, concepts with associated meanings, and subjective experiences of hard-to-describe human feelings such as love, hatred, jealousy, and the like.

Differentiating the Therapeutic Value of Various Occupations

I have shown the potential value of occupational therapy when based on a concept of occupation as it was intended in the philosophical foundations of OT. In addition to coming to rightly understand occupation and the potential power of OT, it is important to examine a question to which I have previously alluded: are all occupations equally beneficial, or are some more health-promoting than others? Were some occupations more valued than others in occupational therapy treatment, or was occupation viewed in a broader sense as human action which, regardless of its type, was health promoting?

In his 1922 paper, Meyer demonstrated an awareness of the delicacy in which occupations must be chosen when implementing them as therapy (Meyer, 1922). In describing his observation of psychiatric patients receiving occupational therapy he remarks that the implemented activity was "...not too readily arousing the desire for big movements and uncontrollable excitement and yet not too taxing to their patience (Meyer 1922, p. 3). Thus even at the outset when OT was first being implemented, it was clear that occupation as a therapeutic tool had to be fine-tuned to match the temperaments and abilities of patients in a given context. But while certainly an important factor, distinguishing the value of different occupations had to do with more than finding occupations to match the temperament of an individual at a given time.

Assessing whether different occupations are more or less health promoting first requires examining how health is conceptualized. In other words, in order to say that some types of occupations are more likely to promote or impede health, we must first know and articulate what is meant by health.

The Problem of Normativity

Normative judgments regarding different occupations appear in OT literature as if they should be taken for granted, as seen in the statement made in Willard and Spackman's text book for occupational therapists: "...even if meaningful, not all occupations are healthful: consider, for example, the personal and social costs of tagging the neighborhood with graffiti..." (Crepeau et al., 2003, p. 16). What are the "personal and social costs" to which they refer? What is it about "tagging the neighborhood with graffiti..." that is, even if meaningful to the individual, not "healthful"? Even if intuitively we want to claim that this behavior would not be therapeutic to an individual, such a claim demands justification. Are some behaviors non-therapeutic because they are illegal? If so, do we want claim that

the legal status (i.e. cultural value) of various human acts warrants the deeming of those acts as healthy or unhealthy?

It is not entirely satisfying to assume an individual to be defective or maladaptive solely because he or she has not successfully adapted within a particular socio-cultural realm. Nor does it seem satisfactory to make value judgments regarding what kinds of occupational engagements an individual may choose. Relating occupational behavior to health will require a valuation system based on something more than an ascription to the values held by a particular culture. This becomes clear with some simple illustrative examples.

Consider, for instance, a time in which homosexual acts were illegal, reflecting an anti-homosexual cultural value. In the given culture, activity which made sense from the subjective standpoint of a 'homosexual' would be defined as unhealthy by the culture, implying that in order to be healthy the individual would have to conform to societal standards, despite the discord between his or her subjective experiences and the legal climate of the society at a given time.

One could reproach this scenario with the suggestion that behaviors with therapeutic value are those that are in accordance with the disposition and temperament of the individual. However, what would we then say of a drug-addicted individual who feels naturally inclined to ingest copious amounts of chemical toxins on a regular basis? Does the personal inclination to do so imply that activity to be healthy? Intuitively, it seems that some 'natural' dispositions are healthy and others are not.

Conceptualizing Health

Competence, Skill, and Social Participation

Kielhofner, Florey, Pierce, Yerxa, and others brought to occupational therapists core concepts toward which treatment could be directed, and concurrently asserted some

normative claims about human health in relation to occupation. For instance, Kielhofner conceptualized health as a proper balance of ‘life spaces’; a balance of the use of one’s time. A healthy balance, to Kielhofner, was one which, through competent participation in one’s culture, brought about personal satisfaction (Kielhofner, 1977). Likewise, although Florey did not explicitly define health, she drew on the work of Robert White, Erik Erikson, and David McClelland to point out the type of environment required to promote a degree of intrinsic motivation that allowed for enactment of competent behavior, implying that this level of intrinsic motivation was healthy (Florey, 1969). Health had to do with competence, which was achieved through cultivation of skills, and this was only accomplished in intrinsically motivated individuals.

Both conceptions of health place importance on competence and participation in culture. Healthy adaptation, for human beings, meant becoming adept within a social context. This was purportedly so because, as a number of scholars have claimed (e.g. Donald, 2001; Laland, Odling-Smee, & Feldman, 2001; Moss, 2006; Moss & Pavesich, 2011), human environments are predominantly social, a point that will be returned to in later chapters. In brief, the point is that, unlike many organisms, humans are not fitted to exist in a particular climate (Laland et al., 2001). Their development appears to be, rather, geared toward social adaptation (Donald, 2001). While able to adapt successfully in a wide spectrum of climates from the tropics to Antarctica, by contrast, humans are particularly sensitive to surrounding social conditions and fail to thrive when certain social requirements are not met. This suggests that healthy adaptation is synonymous with the development of a repertoire of effective means for existing in a social world (Donald, 2001).

So for Kielhofner and Florey, for OT to be effective—that is, for it to foster and/or restore health—the occupation being used as a therapeutic tool must be one fitted to the patient in such a way that it promotes the motivation and competence to engage in skilled social participation. Health was realized in individuals who were motivated to engage in occupation from which they gained satisfaction and a sense of effectance (White, 1964)—that is, they were able to competently affect their surroundings (social and otherwise) in desired ways (Florey, 1969; Kielhofner, 1977). The notions of competence and social participation as defining factors of human health deserve much more attention and will therefore be discussed in detail throughout the remaining chapters.

With a general conceptualization of health in place, OT could be evaluated as successful or unsuccessful based on whether use of a particular occupation brought an individual closer to those characteristics included in that conceptualization. Because occupation was always enacted in a spatio-temporal environmental context, assessments of the therapeutic value of a particular implementation of occupation were always in relation to the sort of environment in which the patient was regularly embedded. Offering, as both Kielhofner and Florey did, a framework for how to implement the newly articulated concepts of temporal adaptation and intrinsic motivation amounted to positing a value judgment of various occupational tasks as they related to particular environmental situations.

Subjective Well-Being

Contributing to the project of how to assess the relationship between various occupations and health, Christiansen et al. launched a research program which examined the ways in which occupations related to subjective well-being (Christiansen, Backman, Little, & Nguyen, 1999). Christiansen did not merely aim to suggest the value of occupation in general for the human organism, but rather sought to distinguish different

kinds of occupation has having more or less value. He states, “occupational therapy was founded on the belief that what people do influences their health and well-being. Yet, knowledge about the specific characteristics of daily occupations that may be health promoting or otherwise beneficial is limited” (p. 91). Christiansen used Little’s concept (from personality psychology) of ‘personal projects’ to explore the connection between occupation and subjective well-being. Quoting Little, Christiansen tells us that “a personal project is an ‘interrelated sequence of actions intended to achieve some personal goal’, or, in terminology familiar to occupational therapists, personal projects pertain to a person’s engagement in ongoing, goal-directed activities” (Christiansen et al., 1999, p. 92). Using the concept of personal projects synonymously with that of occupation, Christiansen’s study revealed, similar to Kielhofner and Florey’s findings, that occupation positively correlated with subjective well-being only when an individual perceived him or herself as making progress toward completion of the task. In other words, occupations that foster a sense of competency are therapeutic in that they bring forth a sense of well-being. Christiansen also found stress associated with occupation to be negatively correlated with subjective well-being (Christiansen et al., 1999). His findings suggested that occupation in general was not always therapeutic for human beings but that instead, only occupations that matched individual abilities and skill levels were valuable.

Based on the studies discussed so far, occupational therapists would have to consider what sorts of occupations would allow individuals to effectively engage within a spatial, temporal, social environment in a way that was not too stressful, yet interesting and personal enough to warrant a degree of intrinsic motivation. If done effectively, OT treatment would instill a sense of competence, aid the person in structuring and organizing

experiences of time, and in so doing foster the realization of increased health and subjective well-being.

Challenges

Earlier I noted Meyer's claim that illness could be conceptualized as a "problem of adaptation" (Meyer, 1922). In the previous section I showed how Kielhofner and Florey considered health in terms of competence, skill, and social participation as well as effectance (i.e. being competent in the ability to affect personal surroundings in desired ways). It follows from the above descriptions that health has to do with being well-adapted to one's environment. Also previously noted, human environments are predominantly social, characterized in terms of a given culture as opposed to a specific ecological niche. So what is to be said of the individual who does not want to become 'better adapted' to her surroundings? This sort of individual is not uncommon, and appears among those with 'issues of motivation' to participate in social environments. Illustrating the challenges in treating these individuals, Janice Posatery Burke in "A Clinical Perspective on Motivation" suggested that the most difficult aspects to address when implementing OT are "the patients' willingness to engage in an activity, the value that is attached by the patients to participating in the activity, and the future use of skills that are developed in the process" (Burke, 1977, p. 254). She notes that some patients readily accept that participation in activity in general will help them acquire skills that naturally develop as a result of the process and are therefore motivated to participate, just for the sake of skill-building. But other patients do not see the relevance of skill-building if it is geared merely toward an ability to function better in a society in which they have failed to find comfort or acceptance in the past.

Occupational therapists generally perceive this sort of individual as lacking a healthy degree of motivation, thus the patient presents an example of a case in which

personal inclinations do not provide an adequate measure of appropriate or healthy behavior (this sort of scenario was alluded to earlier in the example of the inclinations of one who is driven to ingest toxic substances). The patient is seen as ill because he or she does not express interest in improving skills which will purportedly aid in successful adaptation within a given cultural or societal context.

As Burke says of these patients, “feelings of uneasiness, uncertainty, and nonrelevance are ever present...[and often] create an obstacle in the therapy process and are discussed...under the illusive cliché of ‘lack of motivation’” (Burke, 1977, p. 254). But Burke goes on to suggest that these patients suffer, not from “a lack of a desire for the goals that society values, but from a feeling that there is little chance of attaining these goals. The feelings of powerlessness result not from a lack of appropriate values and aspirations but rather from the inability to conquer obstacles” (p. 254). Thus according to Burke, their problem is not a disinterest or conflict of interest in surrounding societal values, but merely a lack of competence to be a part of that society— “a disparity between aspirations and the ability to implement them” (p. 254).

Burke does not consider the possibility of not sharing or being interested in societal goals. From Burke’s perspective, the goal for therapy then becomes finding a way to somehow convince (trick?) the patient into participating, despite any resistance he or she may feel. Such an approach is in line with the notion that some individuals’ ‘natural’ dispositions direct them toward a state of ill health. The idea is to somehow persuade these patients to engage in occupations that will build skills and change their experiences of the societal world; their experiences will be different because their actions will be effective where they previously were not.

Burke has identified perhaps the biggest challenge that occupational therapists face—the question of how “the desire for self-initiated and self-guided behavior [can] be tapped... [the question of] what behavior will prove most profitable to individuals in their particular environment and also hold a source of motivation?” (Burke, 1977, p. 255). Thus Burke adds to the discussion of how to assign value to various occupations by highlighting the problem of lack of motivation. Even if occupation, in and of itself, is health promoting, without motivation or some means of bypassing a lack of motivation, the potential therapeutic power of occupation is rendered useless.

Burke ascribed to the same ideas held by intrinsic motivation theorists (described above) who believe that humans are driven by more than visceral deficits such as hunger, thirst, and sex—that rather, humans with their more complex nervous systems are driven to explore, manipulate, and act (Burke, 1977, p. 256). But what is the source of such ‘drives’? Why, she asks, are human beings motivated to act at all; especially, I would add, if they do not share societal or cultural ideals or possess an interest in societal participation? The following chapters will aim to expand upon this question and offer some possible responses that may turn out to be clinically useful to occupational therapists.

Conclusions: OT’s Current Situation

In examining the history of occupational therapy, it seems that the reincorporation of liberal arts and humanities in OT training in 1967, along with the creation of occupational science and research programs focused on the methodical study of the concept of occupation should have brought occupational therapy back to being a holistic practice with a strong supporting theoretical framework. These occurrences should have promised validation for OT to exist as an autonomous therapeutic practice. However, the recent defensiveness seen in OT literature (Abreu & Peloquin, 2004; Hasselkus, 2001) to both distinguish and validate OT as an autonomous and important discipline suggests that,

despite many efforts to resurrect some initial philosophical foundations and provide clear theoretical underpinnings, influences from the medical sciences continue to dominate occupational therapy practice.

Today, perhaps more than ever, occupational therapists can be found working alongside physical therapists, medical doctors, and other specialists, amongst whom they are not easy to differentiate. Even if an occupational therapist does happen to stand out, recognizable by the fact that he or she is engaging a patient in some sort of ‘life’ activity, these instances are relatively rare, and the occupational activity being used is most often serving to rehabilitate a specific biomechanical dysfunction. Perhaps mental health units are the one setting in which this is not the case—it is possible that occupational therapists working in mental health areas have been able to more easily maintain some of the profession’s original philosophical ideals since mental health settings are where the therapeutic power of occupation was initially recognized and OT was first implemented. Interestingly, however, OTs have largely been eliminated in mental health settings (Crepeau et al., 2009). For the most part, observation of an occupational therapist at work unmistakably reveals the impact and influence of the medical model on treatment approaches and procedures.

The many pleas for further articulation of occupation and its unique contribution to human health, which pervade the *American Journal of Occupational Therapy* and related literature, offer even more convincing evidence that the academic developments around occupation have not alleviated the above mentioned concerns for OT. Florence Cromwell, for example, expresses a concern that OT will be eliminated as a therapeutic practice (or at least cease to be covered by the majority of health insurance plans) without a deeper public awareness of the effects that occupation can engender when used as a therapeutic tool. She

notes, “if we’re going to get our services paid for, particularly in the age of evidence-based practice...we need to have people who are doing significant research that shows what the meaning of activity is in people’s lives” (in Brachtesende, 2005, p. 16). Brachtesende tells us that “the area for improvement most often cited was public awareness of occupation therapy” (p. 16), and quotes occupational therapist and Fellow of the American Occupational Therapy Association Antje Price admitting, “We still have problems defining occupational therapy...” (p. 16). Betty Hasselkus reiterates this sentiment in saying “we in occupational therapy have been in the position of struggling to define ourselves and to be successful in a world of medicine that focused on the etiology and pathology of health at the cellular level (Hasselkus, 2001, p. 247).

The remainder of the present project will aim to address these concerns by expanding the concept of occupation with notions from philosophical anthropology. I will explore the possibility that an enhanced understanding of occupation can offer new ways of promoting health and wellness. In particular, I will demonstrate how occupational therapy as understood by its founders can inform approaches to understanding and alleviating the host of problems arising from what is generally referred to as addiction.

Chapter Two An Occupational Model of Addiction

Introduction

The previous chapter outlined the development and transformations of occupational therapy. Cromwell asked that research show the meaning of activity in people's lives so that the importance of occupational therapy as crucial to restoring and maintaining human health would be made apparent (Brachtesende, 2005). What is the meaning of occupation in human lives? Problems of addiction are a particularly rich area to further explore the meaning of occupation in human lives for two primary reasons.

Striving for Personal Meaning through Occupation

The first reason that addiction provides a means for understanding the meaning of occupation in human lives has to do with the ways in which occupation pervades human experience. There are some similarities between this and the ways that addiction manifests. It is clear that people differ in their occupational choices and preferences, and that the benefits afforded by different kinds of activity are not universal but dependent upon individual characteristics. But the reasons behind these differences are elusive. Why do some benefit from a specific activity where others do not? Why do some become 'hooked' where others remain indifferent? People who find personally captivating occupations around which they can center their lives—their time, identity, and habits—are generally considered fortunate, where those that do not find suitable occupations may be ambivalent about daily tasks and responsibilities, and may have a sense that human action is arbitrary.

Conceptually, it makes sense to envision the relationship between an individual and an occupation on a spectrum. At one end of the spectrum, the occupation in question completely captivates the individual. It becomes the center of her life and the hallmark of

her identity. At the other end of the spectrum the individual is completely indifferent to the occupation in question and therefore has no inner drive to engage in it. Somewhere in the middle of the spectrum we might envision occupations that are instrumental to the individual—that are used as a means for gaining something desirable such as income (through employed work), recognition (through completing socially recognized achievements), hedonic pleasure, mild amusement, distraction...the list could extend indefinitely.

Regarding this spectrum, the first extreme (the case of the individual who finds an occupation to which she becomes hooked, that captivates her, and that directs her daily life activity) seems to conceptually overlap with addiction as generally understood.

Paradoxically, occupations that meet these criteria are, as mentioned above, considered to be fortunate discoveries, yet the captivating powers of addiction are viewed as quite the opposite. Instead of being seen as useful guidelines for structuring a sense of self that translates into daily actions, addiction is seen as an unwelcome constraint that undermines personal freedom. Presumably, this contrast (of positive values placed on most captivating occupations versus negative value attached to addictions) has to do with the tendency to correlate addiction with the use of toxic chemicals which often bring negative consequences for human health. However, addiction and substance abuse are not the same, and such a limited conception of addiction is unacceptable and may be blocking further insight into the nature of addiction. ‘Addiction’ may turn out to be understood as harmful, not in terms of the effects of toxic substances, but rather, on the basis of an understanding of addiction as overwhelming engagement in any activity—the idea being that overwhelming engagement in and of itself is somehow harmful due to, for example, psycho-bio-social constraints brought about by the ‘addiction’. However, the current trend in addiction research is to lump drug use into the definitional category of addiction even

when it is not overwhelming, and to leave out more conventional activities by which people may be overwhelmed⁶.

What is missing in the current, predominant view of addiction (as a barrier to freedom and an avenue toward increasing ingestion of toxic substances) is that the addiction often meets certain needs that are shared by all humans, namely, the need for occupations that are personally meaningful. In this chapter I will articulate a conceptual model of addiction as an occupation. An occupational model is person centered, and is most starkly in contrast to the prevalent disease model of addiction, which conceptually extrapolates addiction from the person and addictive qualities from those substances to which one is addicted. An occupational model addresses addiction as a relationship between a human being and an activity, and is discussed in terms of degrees of attachment to the activity in question and the resulting effects that the activity has on cognitive and behavioral flexibility, all in relation to a particular socio-cultural, historical environmental context. Thus addiction is brought under the scope of all occupations rather than being conceptualized as the product of a genetic, neurological, or mental defect. This inquiry temporarily suspends all normative judgment (to be revisited in chapter three) about addiction in order to gain insight without being influenced by negative connotations about the nature of addiction and addicted persons.

A Top-down Model

The second reason that problems of addiction are useful in exploring the meaning of occupation in human lives has to do with the fact that both occupational therapy research

⁶ Although definitions of addiction are constantly shifting and expanding (see Alexander, 2011)

and addictions research have aimed to pinpoint strict biological mechanisms that are easily manipulated, following the lead of trends in medicine and the scientific industry in general (Friedland, 1998; Gutman, 2006, 2007). Occupational therapists have done so to gain scientific backing for their discipline, and researchers of addiction—in an effort to answer difficult questions about how to define addiction—have directed their focus under the scope of molecular and cellular investigation within the neurosciences. This shift illustrates hopeful anticipation (Gutman, 2006) that the neurosciences might be able to provide, at last, a concrete definition, resolving century-old debates about the nature of addiction. However, there are reasons to resist the biological mechanization of human activity—both occupation in general, and in cases of diagnosing particular disorders such as addiction. Suggesting an occupational model of addiction, while taking issue with the generally accepted disease model (Gutman, 2006; Madras et al., 2006; Roberts & Koob, 1997), concomitantly denounces the understanding of human activity as merely an enactment of neurobiological mechanisms. Thus activity (addictive or otherwise) in human lives is understood as formative rather than prescribed.

The Argument

1- Arguing that addiction is an occupation amounts to saying that (using alcohol addiction as an example) the reason one drinker becomes what we would call an 'alcoholic' or 'alcohol addict' while another does not is that drinker A chooses 'drinking alcohol' as an occupation where drinker B does not. Choosing something as an occupation means using that activity to structure one's time (Kielhofner, 1977); it means using that activity as a means for identity formation; it means that the activity in question elicits volition within the individual (Kielhofner, 2002)—the activity captivates one's attention and invites her to continue to act out her addiction.

2- By contrast, the disease model of addiction begins with the assumption that addiction exists in the form of a concrete, pathological phenomenon supported by aberrant genomic and/or neurological mechanisms. Studies that use the disease model as their conceptual starting point are generally geared toward discovering supposed biological factors that—referring back to the example of alcohol addiction above—cause drinker A and not drinker B to become addicted. They posit that drinker A perhaps has a genetic predisposition to become addicted, which may exist in the form of genes contributing to physiological profiles that cause drinker A and drinker B to differ in the likelihood and severity of withdrawal from alcohol (Crabbe, 2006; Hendricson et al., 2007), or to differ in their preference for alcohol, the degree to which they crave alcohol, or the nature of the effects that alcohol elicits (Crabbe, 2006; Hendricson et al., 2007; Kreek, 2006; Nixon & Crews, 2002). Ultimately, it is argued, these predisposed individuals drink excessively and cause neuro-adaptations that then demarcate them as ‘addicted’. From then on, their behavior is thought to be dictated by this ‘addict’ brain state (Volkow, Wang, Fowler, & Goldstein, 2006). I argue that these, upon closer examination, prove to be inadequate factors for explaining the reason for drinker A’s addiction, both its onset and maintenance.

My approach does not aim to replace the genetic or neurophysiological causal story with other possible causal factors. Unlike the disease model of addiction in which studies seek to uncover the reason that some drinkers (for example) become addicted while others don't, in my approach, the *reason* that one chooses to make drinking alcohol her occupation is not the point of interest, and is seen as synonymous with an inquiry into the reasons behind any two occupational choices being different. Rather, the point of interest from my perspective is the fact that, when viewed as an occupation, characteristics thought to be indicators of addiction (such as the need to engage in the addiction/occupation, and/or the

severe upset, disorientation, and withdrawal that occur if asked to abstain from the addiction/occupation) are comparable to the relationship between any human being and her occupation of choice. In other words, most everyone, I argue, experiences ‘withdrawal’ and the tendency to ‘relapse’ when asked to abstain from an area of their lives upon which they base their identity, derive meaning from, and use to structure their existence into routines and habits.

3- So far, I have not addressed the fact that, in defining addiction as an occupation I have, perhaps counterintuitively, implicated addiction as having the positive connotations generally associated with human occupation. Occupation is understood as something that humans need, that allows them to thrive, grow, and to create and engage in a world of personal meaning (Bruce & Borg, 2002; Crepeau et al., 2009; Kielhofner, 2002, 2004). As I will argue, addiction, too, allows humans to create and engage in a world of personal meaning. It provides a motivational impetus, and guides the individual to form habits and routines. These ideas will be further discussed and clarified, but before embarking on a detailed discussion of what addictions (and occupations in general) do and don’t achieve for the individual, it will be helpful to contextualize these forms of human engagement in anthropological terms. Thus I will briefly describe what it means to suggest that human action is compensation for the human biological and existential situation, offering a preliminary account of “detachment theory” (Moss, 2006; Moss & Pavesich, 2011) that will be expanded in more detail in chapter three.

4-Per detachment theory, if we suppose that humans are lacking prescribed ways of being, are in possession of more degrees of psychological, behavioral, even neurobiological freedom than most other, less complex organisms (Moss, 2006; Moss & Pavesich, 2011), addiction, I suggest, is in some ways the highest degree of compensation for this situation in that it is the most constraint inducing. If the human condition is such that we—as

humans—are in need of direction for how to live, addiction provides very strict instructions for what to do, how to feel, how to act, etc. Having illustrated the need for constraint-inducing constructs in human life through an introduction to detachment theory, I will then describe how addiction meets these needs for constraint, and discuss the implications that different occupations—some highly constraining (i.e. addiction) and others less constraining—have for human lives, always embedded in social, cultural, and historical situations.

Having contextualized addiction in this way, I return my discussion to the ambiguity of findings in the neurobiology of addiction and suggest that the reason for such ambiguity could be reason to think that there are no neurological or genetic components that are driving lifestyle and behavioral repertoires. What *can* be gleaned from neuroscientific literature, I argue, are adequate and plausible accounts of what goes on at the neurological level when an individual engages in certain kinds of activity. For example, models that suggest a loss of neuroplasticity in 'addicts' may be illustrative of a connection between neurological dispositions and behavioral profiles, e.g. reductions in neuroplasticity accompanying a decreased capacity for cognitive and/or behavioral flexibility. However, these neuro-phenomena are not, I argue, determinative of the individual's capacity necessarily but rather exist in bi-directional relationships with occupational choices.

As described above, this chapter will unfold as follows:

- 1-Addiction and Occupation
- 2-Definitional Ambiguities
- 3-Philosophical Presuppositions
- 4-Compensation

Addiction and Occupation: Preliminary Discussions

What would it mean to say that addiction is an occupation? After a brief description of the tenets that comprise occupation as conceptualized by Kielhofner's Model of Human Occupation (MOHO) (Kielhofner, 2002), I will contextualize addiction in these terms. I refer to this particular model (which eventually evolved from expansions on his ideas surrounding temporal adaptation) because, in addition to being the most widely used theoretical model of occupation to date (Lee, 2009), Kielhofner's constructs emerged with strong influences from philosophy (phenomenology), anthropology, and general systems theory (Bruce & Borg, 2002), all of which overlap conceptually with the philosophical anthropological view (Gehlen, 1988; Moss, 2006) of human beings guiding this project.

Model of Human Occupation

As asserted in the previous chapter, occupation's value, both conceptually and as an intervention tool, lies in recognizing the fundamentality of occupation in human life. Occupational engagement, whether chosen by an individual or brought about as an intervention, can summon otherwise non-apparent capacities, feelings, and/or motives within an individual. For instance, the cover of Kielhofner's 2004 "Conceptual Foundations of Occupational Therapy" bears a watercolor of a bluebird atop a blooming branch that was painted by a patient who occupational therapist Susan Tracy commented was "sent from the [psychiatrist] tagged 'not able to concentrate *at all!*'" (Kielhofner, 2004, p. 2, original emphasis). To miss the point that occupation can serve to overcome seemingly fundamental incapacities is to misunderstand what occupation means for human lives.

Yet in the latter half of the 20th century, the majority of occupational therapists had reduced occupation to a means for rehabilitating physical impairments, a shift that still bears influence in current practice (Bruce & Borg, 2002). Occupations such as dressing were the means and ends of therapy; therapists would work with clients on improving range

of motion, for example, through practicing donning a shirt, in order to restore the ability to dress independently. However, Kielhofner recognized that restoration of optimal physical function was not enough to fully re-establish healthy, occupational beings (Bruce & Borg, 2002). Just because a person physically *could* engage in life activities such as dressing, work, and leisure as a result of therapy did not mean she *would*. Unlike the majority of occupational therapists at the time, Kielhofner had an understanding of the richness that occupation could offer as a therapeutic tool, not just in restoring physical function, but in improving motivation through, among other things, the structuring of time (Kielhofner, 1977). He acknowledged, also, that human experiences and actions could not be addressed without taking into account their embeddedness in a complex physical and psychosocial environment (Kielhofner, 1995). Thus Kielhofner's purpose in developing MOHO was to "provide an explanation of (human) occupation [that] focuses on the motivation for occupation, the patterning of occupational behavior into routines and lifestyles, the nature of skilled performance, and the influence of the environment on occupational behavior" (Kielhofner, 1995, p. 2). What was needed to re-direct occupational therapy practice was a concise model that outlined exactly how a richer concept of occupation that included difficult-to-address factors like human will, meaning, and motivation could be put to use in clinical interventions. MOHO was the result of that need, as is illustrated in the following reflection:

The impetus for developing MOHO was the recognition that many factors beyond motor, cognitive, and sensory impairments contribute to difficulties in everyday occupation. These include barriers posed by the physical and social environment, difficulties in choosing and finding meaning in occupations, and the challenge of maintaining positive involvement in life roles and routines. MOHO was developed to address these factors (Crepeau et al., 2009, p. 448).

In what follows, I will discuss the various concepts included in MOHO, concurrently examining how a general picture of addiction might relate to those concepts. In other words, I will be examining what it would mean to say that addiction is an occupation in terms of those concepts Kielhofner marks as central in characterizing human occupation. Of course, this is only a preliminary and largely speculative introduction to what an occupational concept of addiction might rest upon and will therefore need to be followed by a more rigorous and systematic approach in the future (if proven to be warranted) after the general argument has been laid out.

Model of Human Occupation and Addiction

MOHO focuses on three central aspects of human experience: 1) volition, 2) habituation, and 3) performance capacity (Kielhofner, 2002).

1. Volition

Motivation toward doing, and what one chooses to do on the basis of this motivation are accounted for as volition. Under the umbrella of volition Kielhofner denotes personal causation, values, and interests as contributing to the volitional process (Kielhofner, 2004).

Personal causation refers to one's perceptions of her performances in the world, the degree of efficacy she experiences and/or perceives to have in her performances, and the resultant ways in which she directs her activity in future performance based on previously experienced consequences resulting from her actions. In the case of addiction especially, volition is capitalized upon and related to perceptions of personal causation. Activities most commonly conceived of as addictive such gambling or ingestion of drugs and alcohol seem to be quite 'successful' motivators, enticing the addict to continually engage in the addiction (Griffiths, 1996; Ross, Sharp, Vuchinich, & Spurrett, 2008). Gambling and drugs of abuse in particular and known to trigger the dopaminergic reward circuits in the brain

(Ross et al., 2008), which are thought to be involved in motivation and enactment of behaviors to which one is motivated (Lundy-Ekman, 2007). Addiction seems to provide in itself a volitional loop that keeps the addictive behavior going (Ross et al., 2008).

Additionally, many addictions are perhaps perpetuated due to the fact that, as has been noted, addictions generally (at least initially) foster a sense of increased personal efficacy, even if only as perceived by the addict (where onlookers may report observing decreased efficacy). By creating a sense of efficacy along with providing a means for bringing about desired consequences such as a specific internal state (e.g. drunkenness), addictions are related to one's sense of personal causation.

Values, says Kielhofner, define for an individual what is worth doing, and are associated with strong emotions such as feelings of security and worthiness (Kielhofner, 2004). Of course, the object of one's addiction is generally sought to obtain and maintain a sense of security and worthiness (*Alcoholics Anonymous*, 2001; Chelton & Bonney, 1987), and while perhaps failing in the long run as a sustainable measure for ongoing security, undoubtedly the addict 'values' the object of her addiction in the sense that she longs for it, is insecure without it, and is reassured by obtaining it (*Alcoholics Anonymous*, 2001; *Narcotics Anonymous*, 2003; Ross et al., 2008).

Interests, says Kielhofner, begin with "natural dispositions" to enjoy certain kinds of doing, and come about through experiencing pleasure, satisfaction, and attraction toward an occupation based on the anticipation of a positive experience (Kielhofner, 2004). Examples of this experienced pleasure and satisfaction may have to do with aesthetic arousal, intellectual intrigue, or sensory stimulation (Kielhofner, 2004). Again, in the case of addictive drugs or gambling, a central component thought to contribute to these sorts of addictions is that they provide at least one (if not all three) of these sorts of pleasure, so

much so that they are perpetuated due to an ongoing pursuit to recreate such pleasures (Gutman, 2006; Ross et al., 2008).

2. Habituation

Kielhofner (2004) tells us that habituation occurs when one's occupational life self-organizes into patterns that allow individuals to create a familiar social, physical, and temporal context that allows for integrated, functional human activity throughout a lifespan. Habituation allows individuals to appraise environmental features, and brings about learned ways of being and doing, i.e. habits. Habits are, in Kielhofner's terms, "acquired tendencies to automatically respond and perform in certain, consistent ways in familiar environments or situations" (Kielhofner, 2004, p. 150). In addition to habit formation, habituation brings internalized ways-of-being—roles—which then serve as a framework for seeing and acting in the world. Habituation allows humans to engage in many occupations without reflection, freeing attention to attend to and reflect upon other things (Kielhofner, 2004).

Habituation and habit formation are concepts that generally overlap with common understandings of addiction. Addictive drugs are said to be 'habit forming' and when one engages in a particular behavior that she cannot seem to prevent she is said to have an unavoidable 'habit' or to be 'addicted'. Addiction certainly brings about certain roles, whether the role be 'addict', or something more connotative of the sort of population or environment in which one exists as a consequence of continual and frequent engagement in a particular addiction, e.g. gambler, drug dealer, type-A worker, workaholic, etc. People recovering from addictions find that continually identifying as addicts is crucial to maintaining abstinence from the addiction, thus their roles are defined by their commitment to abstaining (*Alcoholics Anonymous*, 2001; *Narcotics Anonymous*, 2003), but nonetheless illustrate that addictions serve to bring about internalized 'roles'.

3. Performance Capacity

For Kielhofner, performance capacity refers to the physical and mental components required for occupational engagement, along with related subjective experiences that they support. This aspect of MOHO refers not only to physiological and mental functions, however. It also draws attention to the impact that lived experience has on the way people perform. In other words, experiences are seen as involved in an ongoing shaping of performance rather than just as consequences of action. Performance occurs within an environment, which is the fourth component of MOHO, but the person and environment are viewed as being part of a dynamic and interactive whole, involved in a constant process of fine-tuning (Kielhofner, 2004).

It may be the case that certain individuals are physically and mentally ‘rewarded’ in some sense by engaging in a particular addiction. Some may find the lived experience of addiction more appealing/appealing than what may be a more fragmented existence if the addiction was not present. If one begins to have a lived experience of a particular behavior that increases pleasure, personal effectiveness, or serves any other phenomenological and/or other needs, an addiction to such a behavior can be a guiding principle in the performance capacity of that individual. The presence of addiction may also be illustrative of a match between mentality, physiology, and the addiction of choice.

I have offered some speculations regarding the relationship between central components of MOHO and addiction as generally recognized. It is worth noting that the way I have characterized addiction above is not entirely unprecedented. For instance, a number of studies have suspected that addiction fills an identity void—that those who have not found other means (occupations) through which they can self-identify find this need

met through various addictions. Cited in Walter's 1996 study of addiction and identity, a cohort study of Swiss-German women demonstrated conflicts in sex-role identity prior to the onset of habitual heroin use (Zimmer-Hofler & Dobler-Mikola, 1992), and self-identification was suggested as being a central component of the decision to smoke cigarettes in seventh and eighth-grade students (Mosbach & Leventhal, 1988). Walter suggested that "identification may play a key role in both the initiation and maintenance of an addiction, not to mention relapse back into an addictive pattern of behavior following a period of cessation or reduced involvement" (Walters, 1996, p. 11).

What is suggested is that personal identification gained through addiction guides both 1) the decision to engage in the addiction and 2) the difficulties that come from attempts to abstain from that activity (Walters, 1996). Accordingly, if an individual aims to quit participating in her addiction but does not find an alternative with which to form her personal identity, it is proposed that this lack of personal identity will very likely drive her to re-engage in the addiction as a means of avoiding severe disorientation and disorganized thinking or lack of an ongoing, coherent self-perception (Walters, 1996). Supporting this proposition is the finding that relapse is most prevalent in individuals who are continually labeled as addicts by family, friends, and self (Walters, 1996)⁷. Since their identities are wrapped up in addiction, these individuals have a tendency to return to the self-defining behaviors/roles accompanying their addiction to maintain coherence. Further support for this claim comes from the finding that 16 former heroin addicts who successfully abstained from heroin use for 10+ years each began their period of abstinence due to "a crisis that focused their attention on identity issues and ultimately encouraged a change or

⁷ Although, as already mentioned, ongoing self-identification as an addict is also central in 12-step programs to recover from addictions (Alcoholics Anonymous, 2001; Narcotics Anonymous, 2003).

transformation in their self-view [and after prolonged abstinence] showed few signs of their former addictive selves” (Walters, 1996, p. 13).

These findings together suggest that addiction’s rigorous hold on the addicted individual has to do with the role of the addictive behavior in providing a personhood accompanied by prescribed ways of thinking, feeling, acting, and being. The need for personal identity is fundamental and warrants engagement in recurrent participation in various ‘addict’ activities despite their seemingly pathological, maladaptive, or deviant nature.

In a similar vein, Chelton and Bonney suggest addictions to be an attempt to bring about specific affects and intense feelings “for the purpose of reestablishing or maintaining a cohesive sense of self when that self is threatened by loss of continuity...it is a temporary reconstitutive affect system, acting as an affective prosthetic to shore up a fragile self state” (Chelton & Bonney, 1987, p. 40). Chelton and Bonney’s notions of addiction are an extension of self-object theory (Kohut, 1977). They hold that any behavior which is enacted with the purpose of “help[ing] maintain order and continuity in the sense of self” (Chelton & Bonney, 1987, p. 40) is potentially an addiction.

Chelton and Bonney go on to offer some descriptive states that may be underlying reasons for choosing (or falling into) addictions. They describe “an understimulated self state...[in which] addicts are lacking in vigor and stimulation, having no goals or meaning in their lives. At other times they feel fragmented and anxious” (p. 40). They differentiate between common and addictive engagements of basic activities, noting, for instance, a distinction between eating for nourishment and eating “in a desperate attempt to relieve the agony of a crumbling self” (p. 42). While I will not distinguish addiction from occupation in this way (in terms of the degree of vulnerability of the individual in question), Chelton

and Bonney's general propositions about the need for harnessing feelings of fragmentation, anxiety, and the agony of potential self-crumbling serve as introductory to themes of the philosophical anthropological view of the human organism that will be expounded later in this and subsequent chapters.

So far, I have been speaking of addiction in a general way. The next section will examine some of the difficulties that have arisen in debates about defining addiction and related phenomena. A discussion of conceptual difficulties and conflicting inferences drawn from neurobiological findings will illuminate the many contradictions that exist in the way the concept of addiction is currently treated, making the need for a new, unifying conceptual model apparent.

Definitional Ambiguities

Conceptualizations

While most people have an idea of what addiction is, a unified concept of addiction does not exist (B. K. S. Alexander, Anton R. F., 1988; Comer, 2007; Walters & Gilbert, 2000; Wasserman, 2004). In an effort to address the discrepancy between what does and does not constitute an addiction, various definitional criteria have been proposed. Generally, addictions are thought of as compulsions to engage in a particular behavior or ingest a particular substance (Madras et al., 2006; Potenza, 2006). They are thought to be accompanied by a sense of impaired control (the addicted individual cannot prevent themselves from engaging in the addiction), and going without the substance or behavior in question is intolerable (*Alcoholics Anonymous*, 2001; Potenza, 2006; Ross et al., 2008).

Currently, the fourth edition text revision of the *Diagnostic and Statistical Criteria for Mental Health* (DSM-IV-TR) includes a definition of 'substance dependence' under a broader category of 'substance use disorders', but does not include the term addiction at all. Addiction is most often likened to the provided definition of 'substance dependence'

(Comer, 2007; Griffiths, 1996; Madras et al., 2006; Potenza, 2006), but because of the absence of a strict definition specifically for ‘addiction’ in the DSM-IV-TR, the concept of addiction is treated differently in various disciplinary studies, with emphasis on different characterizing factors (Comer, 2007; Wasserman, 2004). Further, ‘addiction’ often refers to cases that cannot be accounted for by the substance dependence definition (Griffiths, 1996; Potenza, 2006; Ross et al., 2008).

Nonetheless, recent discussions (Potenza, 2006) have explored the possibility of replacing ‘dependence’ with ‘addiction’ in anticipation of publication of the fifth edition of the DSM, which raises questions about definitions of both, and whether and how to distinguish addiction from dependency. Dependence, like addiction, has been met with conceptual and definitional confusion (Potenza, 2006). Often thought of as a purely physical phenomenon, dependence generally refers to a biological need and is less often described in terms of some of the more phenomenological or psychological experiences frequently reported to accompany ‘addiction’ (Potenza, 2006). For instance, chronic administration of beta-blockers to treat hypertension can result in ‘dependence’, marked by tolerance requiring increased dosages and withdrawal symptoms if ingestion of medication ceases (Potenza, 2006), but beta-blockers are not craved in times of stress, and do not ease an overwhelming sense of emptiness (two characteristics often described in cases of addiction) (*Alcoholics Anonymous*, 2001).

The term ‘dependence’, in general, underscores the presence of physical processes occurring as the result of chronic use of a substance. Attempts to differentiate addiction from dependence have described addiction as a dependency with other additional aspects included, namely, the presence of an internal or external conflict that is the result of the addictive/dependant behavior (Ross et al., 2008; Walters & Gilbert, 2000). According to

many definitions, the addicted individual must have either an *internal* conflict such as a desire to stop engaging in the addictive behavior or unsuccessful efforts to quit, or the behavior must be causing some kind of *external* conflict such as interfering with important relationships (e.g. family obligations) or responsibilities (e.g. maintaining employment) (Griffiths, 1996; Gutman, 2006; Ross et al., 2008; Walters & Gilbert, 2000; Wasserman, 2004).

Further complicating the issue, Potenza points out that ‘dependence’ as commonly understood (physical dependence) and the definition of ‘substance dependence’ in diagnostic terms (DSM-IV-TR) are quite different and bring confusion. ‘Substance dependence’ in the DSM-IV-TR is defined as a physical dependence alongside other criteria such as the phenomenon of craving and the presence of an internal or external conflict, just as described above with regards to defining addiction against mere dependence. In short, ‘substance dependence’ as defined in the DSM-IV-TR and most efforts to define addiction come up with the same criteria, which can be distinguished from mere (physical) ‘dependence’.

Illustrating the emphasis on the presence of a conflict as a diagnostic criterion for substance dependence, the DSM-IV-TR lists “continued use despite recurrent problems related to use”, “important social, occupational, or recreational activities given up because of use”, and “persistent desire or one or more unsuccessful efforts to cut down or control substance use” (DSM-IV-TR). Potenza’s argument that ‘addiction’ should replace ‘dependence’ in the manual rests on the claim that ‘dependence’ is more commonly associated with mere physical dependence where addiction brings the other sociological connotations (Potenza, 2006). Replacing ‘substance dependence’ with ‘addiction’, argues Potenza, would eliminate some of the confusion since what is intended by ‘substance

dependence' is more often conveyed in general use of the term 'addiction' than in use of the term 'dependence'(Potenza, 2006).

Implicit in these conceptualizations, too, is that addictions (and substance dependency), unlike mere physical dependencies, are thought of as being to substances that are not necessary or conducive to one's health. Dependence on beta-blockers does not include an inter- or intrapersonal conflict, but is also the product of taking medicine to foster health and is therefore conceptualized as different from, say, dependence on alcohol, which is generally known for its negative impact on health. Hence if limiting our discussion to these definitional terms, 'dependence' is more likely to occur as a result of using socially acceptable substances such as medications where addiction is thought of as reliance on a substance or activity that is superfluous and more likely to have negative rather than beneficial effects on one's health.

It is also interesting to examine the ways the terms are used in everyday language. Doing so underscores some shortcomings in the above-mentioned ways of defining addiction (as dependence plus an internal or external conflict). People speak of being addicted to (not dependent on) coffee. However, an 'addiction' to coffee—which includes craving, and sometimes quite severe withdrawal symptoms upon abstinence—generally does not pose a conflict (likening it more to a mere physical dependence), but is superfluous and possibly unhealthy (likening it more to an addiction). Regarding the conflict criterion, it is unlikely that the 'addiction' would interfere with employment or family relations. In the absence of an external conflict, an internal conflict such as a desire to quit and an inability to do so would be required for the individual to be considered as having an addiction or DSM-IV-TR-defined substance dependency as opposed to a mere physical dependence on coffee. It seems odd, however, to define addiction/substance

dependence in this way. If two people craved coffee and experienced withdrawal during abstinence from coffee, and one wanted to quit and couldn't and the other was perfectly happy continuing with daily coffee consumption, it would be odd to label one as an addict (or substance dependent) and the other not. It seems that a definition of addiction should describe something more concrete, independent of the desire to change one's behavior.

A few decades ago, prior to the plethora of studies linking cigarettes to numerous health problems (WHO, 2009) and the resultant stigmatization of smoking, based on the definitions outlined thus far, one might be physically dependent on cigarettes without bringing perceived harm to family, friends, and society, and with no internal conflict. By the definitional criteria, smoking would not be an addiction. But because of changes in societal perceptions and information about the impacts of smoking on physical health, smoking, now, likely brings conflict due to the knowledge that one is putting him or herself in a compromised state of health, and is also receiving negative feedback from society, thus bringing the habit under the definition of an addiction. Hence scientific knowledge and resultant societal stigmas also influence whether something is considered to be an addiction.

In the above discussion I have described some of the difficulties in defining addiction; I have illustrated that defining addiction rests on changing contextual factors such as scientific knowledge about the impact of certain substances on health, and cultural values regarding participation in the consumption of various substances.

Neurobiology

The neurosciences have been perhaps the largest players in attempting to elucidate the contributing factors that constitute addiction, and to devising a descriptive and causal account of what addiction is. A different, but perhaps more important issue than explicitly defining addiction within the neurosciences is understanding underlying physiological

aspects that may give rise to those factors generally thought of as accompanying or characterizing addiction that are problematic for the individual. Increased understanding in this area, it is thought, could bring with it the possibility of devising intervention strategies to relieve symptoms and restore well-being, likely in the form of pharmaceuticals.

According to a study in the 2006 collection, *The Cell Biology of Addiction*, the most commonly used definition of addiction in cell biology is “compulsive drug-seeking behavior and drug self-administration without regard for the negative consequences to self and others” (Kreek, 2006, p. 63). Or a more detailed commonly accepted definition specific to opiate addiction is “daily self-administration of illicit opiates for one year or more with development of tolerance and physical dependence and without regard to potential harm to self, others, and society” (p. 63). Of course, the findings produced by neuroscientific studies will likely elucidate only those aspects of addiction that are comprised by the presumed definition of addiction. For instance, a study using the definition of opiate addiction mentioned above will be geared toward understanding mechanisms possibly responsible for craving or compulsion to self-administer illicit opiates, discovering neurobiological underpinnings of the development of tolerance, and identifying biological factors contributing to physical dependence (such as disturbances that occur when opiate administration ceases).

The problem that remains is that neuroscientists must start with some idea of addiction that serves to guide their investigation. While studies may be successful in characterizing some aspects of the concept of addiction with which they begin, they are limited by these self-imposed definitions, and more problematically, these guiding definitions seem to ignore the conceptual complexities discussed above.

For instance, in her 2006 article explaining the “chronic, relapsing course of addiction,” Sharon Gutman suggests that the past five years have yielded substantial evidence indicating addiction to be, simply, a “neurobiological condition rooted in genetic factors” (Gutman, 2006, p. 1). She claims that an addictive process is marked by the occurrence of neurological changes which are responsible for characteristics commonly assumed to accompany addiction, including craving, tolerance, and withdrawal.

In this vein, numerous studies search for those genetic factors in which ‘addiction’ is rooted. This is generally done by narrowing the search to one for genetic factors related to one aspect of addiction, e.g. withdrawal during abstinence. The genomes of subjects, some who experience severe withdrawal symptoms during abstinence from a substance, others experiencing mild or no withdrawal symptoms, can be compared. The assumption is that genetic variants are etiologically linked to neurological excitability in relation to withdrawal from specific substances such as alcohol. It has been proposed that these genetically-driven differences in experiences of withdrawal may cause some individuals to become addicted to specific substances, (Crabbe, 2006) supposing the commonly used definition of addiction mentioned above of “compulsive drug-seeking behavior and drug self-administration without regard for the negative consequences to self and others” (Kreek, 2006, p. 63). What is being suggested is that, because of genetic factors, an individual’s experience of withdrawal is disturbing enough to cause her to harm herself and (directly or indirectly) harm others by compulsively seeking and ingesting the drug to which she is addicted for the sake of avoiding the disturbing withdrawal experience.

It is worth noting that evidence supporting these claims comes from studies done on animal models. Withdrawal from ethanol in mice can be measured by inducing what is referred to as the handling-induced convulsion, discovered by Dora Goldstein in the 1970’s and considered a reliable way of quantifying central nervous system excitability in relation

to other influences such as withdrawing from alcohol (Crabbe, 2006). The excitability induced through handling is measured during the presence and absence of withdrawal to observe how withdrawal impacts this response.

To show that differences in ethanol withdrawal had to do with genetic variants, John C. Crabbe at the Portland Alcohol Research Center, Oregon used gene mapping techniques to isolate two genotypes, DBA/2J and C57BL/6J, that differed only in very specific genomic regions and expressed differences in the severity of symptoms during ethanol withdrawal (Crabbe, 2006). It should be noted that, within a single strain (the DBA/2J genotype group, for example), differential withdrawal responses were observed to some extent. Attributing differences in withdrawal symptoms to genomic influences could therefore be perceived as problematic because, even in individuals with the same genome, differential responses were observed. To accommodate this, Crabbe appealed to a measuring criterion suggested by Hegmann and Possidente (1981) as a way of deciphering genetic from other contextual influences. This measuring criterion stated that, if the differences observed within a single genotype were fewer than the differences observed between different genomic strains, a differential genetic influence could be supposed (Hegmann & Possidente, 1981 in Crabbe, 2006).

Through gene mapping, Crabbe found gene *Mpdz* (which codes for multiple PDZ (mPDZ) domain protein), to have an effect on the severity of withdrawal symptoms. This finding was reached by observing patterns of gene expression during withdrawal from ethanol in the two previously mentioned genotypic strains of mice, DBA/2J and C57BL/6J. C57BL/6 inbred mice were reported (originally by McClearn & Rodgers in 1959, but the finding has been replicated many times) to prefer to drink ethanol solutions and DBA/2 mice were reported to avoid them. It was observed that those mice that preferred ethanol

(C57BL/6J) also had low withdrawal responses whereas DBA/2J ethanol-avoiding mice demonstrated more pronounced distress during withdrawal (Crabbe, 2006).

Of these two genotypes, *Mpdz* was the only gene that was differentially expressed, leading Crabbe to conclude that it was responsible for the difference in withdrawal symptom severity. He further concluded that ease of withdrawal likely contributed to ethanol preference whereas the stress-inducing effects of withdrawal in DBA/2J mice likely contribute to their disinterest in ethanol consumption (Crabbe, 2006).

A common explanation for chronic and compulsive alcohol ingestion in neuroscientific research, however, suggests that alcohol is chronically consumed to continually evade the distressing symptoms of withdrawal (Koob & Le Moal, 2005). Crabbe's suggestion that ethanol preferring (implied is that ethanol preference connotes likelihood of alcohol addiction) mice are those that can drink 'comfortably' because of less severe withdrawal symptoms is therefore in direct contrast with much of the neurobiological research on alcohol addiction. If, as Crabbe suggests, alcohol preferring mice have milder withdrawal symptoms than alcohol-avoiding mice, it would seem that the compulsion to drink would be less than if withdrawal symptoms were severe. If exposed to alcohol, despite initial preference, if severe and disturbing withdrawal symptoms were eased by drinking more alcohol, it seems that these severe-withdrawal mice would be more likely to demonstrate a compulsion to drink.

Similar to Crabbe's approach, another study sought to account for nicotine addiction by noting molecular-level observed differences in the development of tolerance to nicotine and its relationship to nicotine preference. Nicotinic receptors (nAChRs) are expressed on neuronal dendrites and soma. They mediate fast synaptic transmission by contributing to neuronal excitability—their activation modulates neurotransmitter release of norepinephrin, glutamate, GABA, and dopamine, which are known to have pronounced

effects on mood depending on the various ways in which their transmission is altered (Tapper, Lashmi, & Nester, 2006). Thus the effects that nicotine will have on one's mood may vary depending on biological dispositions, and these variances, it is argued, may be indicative of the likelihood of nicotine preference and ultimately, nicotine addiction.

Currently the predominant role of nAChRs is thought to be in modulating neurotransmission presynaptically (Tapper, Lashmi, & Nester, 2006). Their function varies, depending on the subunits of which they are composed (Tapper, Lashmi, & Nester, 2006). Nicotinic receptors exist in three conformations: open, closed, and desensitized, the last having the highest binding affinity (Tapper, Lashmi, & Nester, 2006). When nicotine binds a closed receptor, that receptor's channels are opened. Once channels are opened, nicotinic receptors gradually become desensitized. The rate at which desensitization occurs depends on subunit composition of the receptor. For example, $\alpha 4$ subunits, composed of strings of amino acids, are longer than $\beta 2$ subunits and have a greater number of phosphorylation sites (Tapper, Lashmi, & Nester, 2006). The larger number of phosphorylation sites is thought to be responsible for slower desensitization rates as well as faster recovery from desensitization. It is argued that the rate of desensitization has implications for craving, withdrawal, and the development of tolerance to nicotine (Tapper, Lashmi, & Nester, 2006).

Neurobiological studies further suggest that whether an individual experiences drug ingestion as pleasurable or disturbing may depend on number and location of receptors and associated signal transduction pathways, thus one's biological disposition in this way could influence the likelihood of regular use. But just as in Crabbe's study of ethanol preference in relation to genes affecting severity of withdrawal from alcohol, the ambiguity regarding associations between possible influential factors and use preference persists. It is not clear

whether a biological disposition that potentially makes drug ingestion overstimulating (and possibly upsetting) would make one more or less likely to use that substance addictively, and the same is true for possible biological dispositions that make drug ingestion understimulating and unremarkable. Both could be a cause for increased or decreased use.

It is possible that initial preference for a substance has little or nothing to do with continued use. Further, despite biological differences potentially affecting the way one experiences drug use (such as withdrawal severity, tolerance development, or the direct visceral effects of use), one's reason(s) for using or not using may override such factors. It certainly may be the case, for example, that someone who initially experiences ingestion of a substance as unpleasant may continue to use until the activity becomes enjoyable such as in the case of drug and alcohol 'enculturation,' during which the individual is encouraged to continue using to 'acquire' a taste for the substance in question. Marijuana smokers often do not experience a high the first time they smoke the substance (American Council for Drug Education) and must be encouraged to continue smoking—they must be 'taught' how to get high.

Furthermore, intentional continuation of substance ingestion will almost certainly invoke neurological adaptations within the individual, thereby rendering the initial disposition possibly irrelevant with regards her status as likely or unlikely to enjoy and/or regularly use the drug in question. Examples of neuroplastic changes resulting from drug use abound (Carpenter-Hyland & Chandler, 2007; Gutman, 2006; Hendricson et al., 2007; Koob & Le Moal, 1997, 2005; Nixon & Crews, 2002; Ross et al., 2008; Tapper, Nashmi, & Lester, 2006; von Zastrow & Evans, 2006). For instance, it is well documented that regular use of opioids results in changes in synaptic plasticity and receptor number and location (Zastrow & Evans, 2006) such that even if one initially were disposed to experience opioids

as unpleasant, regular use in spite of this may invoke changes that allow one to later find the experience of opioid ingestion highly rewarding.

Another example of a neuroadaptive accommodation of drug use is seen in redistribution of glutamate receptors that occurs in order to compensate for the otherwise inhibitory effects that result from chronic alcohol ingestion (Chandler, 2006). Two categories of glutamate receptors have been identified: iGluR and mGluR. The iGluR family consists of NMDA, AMPA, and kainite receptors (Chandler, 2006). The functional differences of these receptors are defined by different combinations of subunit proteins (Chandler 2006). NMDA receptors are particularly prevalent in the nervous system. Tracking the trafficking of newly synthesized NMDA receptor subunit expression shows that these receptors vary in their distribution as a consequence of both subunit composition and other influences. For example, following chronic ethanol exposure, a movement of NMDA receptors from extrasynaptic to synaptic sites was observed and resulted in NMDA-related current changes. NR1 subunit expression levels were 33.6% greater than control groups and remained elevated throughout a twenty hour post-withdrawal period, while NR2B subunit expression levels were 26.9 percent greater than controls and also remained elevated for the post-withdrawal period (Hendricson, 2006). These increases in subunit expression were localized in dendritic spines, which are likely synaptic sites (Hendricson, 2006). These findings suggest that increased expression of particular NMDA receptor subunits (NR1 and NR2B) are associated with (re-)distribution of NMDA receptors in response to ethanol exposure.

This selective targeting of NMDA receptors to synaptic sites has been deemed a “homeostatic adaptation to chronic ethanol exposure” (Chandler & Carpenter-Hyland, 2006). Chronic ethanol exposure has been suggested to have a destabilizing effect on

glutamatergic transmission, based on observations that its effects lead to prolonged inhibition of NMDA receptors (Chandler & Carpenter-Hyland 2006). Thus the notion that molecular modification of synapses is a homeostatic adaptation suggests that observed synaptic increases in NMDA receptor expression occur to compensate for this ethanol-induced NMDA inhibition, thereby counteracting ethanol's destabilizing effects.

So far I have shown that, despite lofty claims (e.g. Gutman, 2006) that 'addict brains' result when specific genotypes meet addictive substances and thereby claim dominion over the whole person (who is now obliterated of her personal autonomy), *actual* findings that could plausibly support this story are ambiguous, and the potential for misinterpretation is high. I have summarized a number of findings that illustrate the plasticity of neuronal networks. The accommodations made at the neurological level in response to various inputs call into question the notion that addiction could be diagnosed in terms of neurological 'preferences' that, themselves, were prescribed by genetic instructions. But even if we suppose, for the time being, that there *are* specific genetic factors that lead to certain brain dispositions which demarcate preferences for certain substances and thereby indicate the likelihood of developing addiction, there are other reasons that the 'addict brain' model fails. I will discuss these now.

Addiction as a Progressive Disease

Many of the above-mentioned approaches to understanding addiction implicitly (or explicitly) suggest that addiction results from extensive use of the object or participation in the activity to which one is addicted. This supposition brings with it the assumption that addiction is progressive, advancing from use/engagement to abuse to addiction. Addiction to drugs and/or alcohol (the substances most commonly associated with addiction) is thought of as progressive in the sense that over time, drug use results in neuroadaptations that are characteristic of an 'addicted brain'.

Support for this notion comes from brain imaging studies showing the existence of drug-induced changes in the brain that precede the onset of behavioral or psychiatric demonstrations fitting the diagnostic criteria for substance dependence and/or operational definitions of addiction (Volkow, Wang, Fowler, & Goldstein, 2006). This data is interpreted to suggest that addiction is indeed the eventual result of confounding factors that are gradually brought on by use and abuse of particular substances (Volkow, Wang, Fowler, & Goldstein, 2006), the idea being that behavioral aspects of addiction show up after a certain threshold is crossed, when the effects of a drug on the brain aggregate and are compounded, resulting in the transition from drug abuser to drug addict.

An alternative way of thinking about drug use and addiction would be called for, however, if the existence of behavioral manifestations of addiction preceded ongoing and extensive use of the drug in question. For example, if some individuals use addictively right away, it would not make sense to regard addiction as something resulting from ongoing use of a drug. This scenario has been widely observed. For instance, in the most common treatment setting for alcohol addicts—Alcoholics Anonymous—alcoholics often report “drinking alcoholically” from the start of their engagement with alcohol (Alcoholics Anonymous, 2001).

Additionally, neuroadaptive consequences of drug use are not always the same. Quite the contrary; “the biological imprint of drug use is unpredictable” (Madras & Lin, 2006, p. 240). This is not to deny the fact that particular neurological adaptations can often be traced back to repeated exposure to a drug (see Madras, 2006). But while researchers are discovering clues as to how the brain adaptively responds to drug use, these findings are not necessarily telling much about *why* an individual compulsively uses, nor are they bringing us closer to an understanding of how to best conceptualize addiction.

Against determinism

Regarding addiction and the impact of associated neurological criteria, it has generally been argued that use of certain substances or engagement in certain activities changes the brain in ways that lead to a situation in which the person is controlled by her brain. In other words, it is posited that, through a pattern of activity, the brain has been altered and has become an ‘addicted brain’. The individual’s ‘addicted brain’ becomes the explanation for continued engagement in the addiction despite hindrances in other life areas, or despite the lack of ongoing pleasure acquired by the addiction because of tolerance, or despite societal conventions encouraging the individual to engage in more ‘acceptable’ and lasting pursuits, or even despite a personal desire to abstain.

My suggesting addiction as an occupation contradicts this supposition that one is controlled by her ‘addicted brain’ and, to the contrary, provocatively suggests addiction to be an occupational choice. This claim is likely to raise strong objections from many angles. One is likely to argue that people don’t ‘choose’ to be an addict, merely on the basis that the very nature of addiction as commonly understood suggests exactly the opposite, that one is an addict because she no longer has the ability to choose differently. Why, in light of commonly cited misgivings (e.g. legal, financial, or social difficulties), would someone choose an addiction? Before addressing this question, it is necessary to lay out some anthropological suppositions that are guiding the course of my argument that addiction is an occupation, and further, an occupational choice.

Philosophical Presuppositions

Detachment theory (Moss) suggests that the simplest living unit, the cell, is detached. The term detachment as it pertains to this theory of living beings needs some unpacking. While commonly denoting disengagement, separateness, and isolation, ‘detachment’ here might be better understood or at least augmented in terms of flexibility;

cells are not wholly separate or distinct (detached) from their immediate surroundings⁸, but have an organization that introduces a degree of flexibility in terms of the way a cell responds to and interacts with those influences that lie external to its spatial boundary, the cell membrane. While cells are contextually dependent upon bidirectional interactions with those influences that lie external to the cell membrane, they possess an internal structure that allows them to maintain a dynamic but consistent and separate (detached) identity. This identity is maintained (more or less) in the face of varying external conditions (Moss, 2006).

Detachment refers to a degree of freedom that cells have with respect to external conditions. The ways in which a cell can respond to a specific environmental stimulus multiply as cellular complexity increases. Detachment theory holds that all living beings are detached, but to varying degrees. Where the simplest living cells' dispositions cause them to respond to particular stimuli in a prescribed fashion, more complex beings gain in degrees of freedom from this tight coupling between stimulus and response (Moss, 2006).

Multicellular organisms, by nature of their complex organization, exponentially multiply the range of possible responses to environmental cues. Cues may come from cells that are part of the organism in question, or may come from outside the boundaries that define that organism. Cues may engender a number of chemical and physiological changes to which the organism as a whole may respond in a variety of possible ways. The organism may be driven by or may find the ability to overcome/ignore these cues and/or chemical/physiological changes (Moss, 2006).

Detachment theory holds that what has allowed for the human organism to evolve is this detachment from tightly coupled environment-response patterns. Biological evidence

⁸ See developmental systems theory on niche construction (Laland et al., 2001)

that both supports detachment theory and illustrates how greater detachment from the environment was made possible lies in findings of increasing genomic flexibility along evolutionary lineages. Genomic flexibility is characterized by increased dispersion of coding regions in the human genome; this allows for more reshuffling and recombination of coding sequences, and the capacity for greater variability in gene expression as a consequence of increased regulatory controls (Moss, 2006; Moss & Pavesich, 2011). Another finding that has purportedly allowed for greater detachment is the loss of olfactory ‘attachment’ to environmental cues; where non-human primates (and other animals) are highly sensitive and behaviorally responsive to olfactory cues, humans are relatively free from reactionary responses to olfactory input. This is purportedly related to the loss, in humans, of many genes from the gene family that makes olfactory receptor molecules (Moss, 2006).

Another way of talking about detachment is in terms of instincts; the process of becoming more detached can be understood as being less constrained by instinctual drives. A number of philosophical anthropologists have built theories regarding human nature around the notion that humans are “creatures of instinctual deficit”(Pavesich, 2008, p. 429). Much research (see Pavesich, 2008) has supported the notion that a “reduction of instincts, an apparently phylogenetic severing of almost all the firmly established connections between ‘releasers’ and innate, specialized patterns of movement” (Gehlen, 1988, p. 19) provides a basis for distinguishing humans from their evolutionary ancestors.

Also supporting detachment theory is evidence that the human genome has fewer genes associated with specialization and maturation (Moss, 2006; Moss & Pavesich, 2011). This claim is in agreement with findings described by Louis Bolk (1926) in his theory of neoteny, in which features of adult humans (such as skull anatomy, skin pigment, body hair, and endocrine-dependent rates of sexual maturation) were compared to (and found to

resemble) those of infant chimpanzees (Bolk, 1926). Bolk's work provided biological evidence for the idea that humans are underdeveloped—that a slowed process of maturation and specialization has resulted in a prolonged or permanent infantile state which characterizes humans. Comparing adult humans to infant chimpanzees suggests that humans are premature, lacking instincts to instruct their actions, and therefore biologically unprepared, always “trying to strike a balance between embodiment and the lack of a pre-given orientation” (Pavesich, 2008, p. 428). Preserved in humans' permanently infantile state, however, remains an exaggerated capacity for adaptive intelligence due to, like infants, a surplus of undifferentiated neurons, greater plasticity, waiting-to-be-developed potentials, and childlike qualities such as curiosity and the desire for/seeking out of novelty.

Bolk's theory informed the work of Arnold Gehlen, who put forth the idea that human action was a necessary response (a ‘compensation,’ in the language of detachment theory (Moss, 2006; Moss & Pavesich, 2011)) to the human situation as described by Bolk (Gehlen, 1988). To survive, and to have a basis for action, humans develop “cultural constants that reduce the arbitrariness of human existence, ...[which include] habitual patterns of thought and behavior and mundane forms of social organization, including language, manners, and morals that can supply a platform for a self-directed process of development” (Pavesich, 2008, p. 429). These become “so routinized that they have become analogous to instinctual behavior” (p. 429) and thus make up for human's underdevelopment and lack of instincts. Detachment theory makes a similar claim, noting that the greater the degree of detachment of an organism, the more dire the need for compensation (Moss, 2006; Moss & Pavesich, 2011). Gehlen uses the term ‘institutions’ to refer to these replacements for instincts. I would like to draw attention to the ways in

which the concept of occupation seems to overlap with Gehlen's 'institutions' and/or the notion of compensatory (Moss) action.

Gehlen suggests that human beings must (somewhat arbitrarily) create rules (institutions) for how to act, and then abide by those rules to the point that they become so engrained (Kielhofner's "habits" or "habituation") that they are perhaps inseparable from the individual who practices them. The individual is created, defined, and recognized in terms of her set of personal practices (occupations). Taking away these routines leaves individuals inconvenienced at best, completely disoriented and dysfunctional at worst.

Drawing a parallel between human occupation and Gehlen's concept of institutions somewhat drastically emphasizes the meaning of occupation in human lives. By viewing occupation in light of this broader evolutionary picture, it becomes more than just a way of amusing, occupying, and/or caring for ourselves. Rather, human occupation is seen as analogous to animals' instincts. Conceptualized in this way, occupation in human lives is essential, fundamental, and necessary for survival.

Why is this important? As already mentioned, my claim that addiction is an occupation is troubling and counterintuitive because occupations are usually seen as favorable aspects of human experience where addictions are often considered and defined as pathological. My suggestion that addiction is an occupation seems to appraise addiction as valuable. It is through an illustration of the above philosophical anthropological presuppositions that the benefits of addiction become apparent. When I speak of the benefits of addiction as an occupation, I am referring to the ability of addictions to compensate for the posited evolutionary loss of instinctual drives that has resulted in a uniquely vulnerable existential situation that begs for constraints. Returning to the question I posed earlier, why would an individual turn to an addiction? The reason may have to do with the degree of constraint that addictions provide; addiction is perhaps the

most extreme response to the human existential situation as described thus far because it is, compared to occupations in general, the most constraining, thus meeting the demands of a severely underdetermined organism. However, here one is likely to object that, despite the much-needed imposition of constraint that addictions can provide, the corresponding (social, physical, psychological, legal, etc.) repercussions that addictions bring distinguish them from occupations; the latter provide the much needed constraints without these negative consequences. I will now address this concern in the following section, which discusses the implications that various occupations (including addiction) have for humans who engage in them.

Compensation

As mentioned earlier, a goal of this project is to remove value judgments regarding addiction in order to gain insight and perhaps understand addiction in a more fundamental way. In taking a non-moralistic stance toward gaining insight into problems of conceptualizing addiction (alongside the project of coming to know the meaning of occupation in human lives), how can we best account for those aspects associated with addiction that are generally considered to be pathological? First, it is important to point out that, in most literature, the ‘pathology’ of addictions turns out to be a discussion of what is pathological about chronic ingestion of toxic chemicals. In setting aside pathological effects of chronic ingestion of toxins, however, the ‘harms’ of addiction become less obvious. One still may cite the ‘conflict’ criterion mentioned in section two—namely, that addiction is harmful because it conflicts with internal or external desires and/or expectations—or one may point out the harm of compromised personal autonomy illustrated when a person wants to stop engaging in an addiction because of internal or external pressures (conflicts) and cannot. But the perceived harms of addiction appear to

apply to occupation in general. The desire to stop doing something and the inability to do so are not so uncommon. Habits and routines are a part of everyday human life, are defining factors of human occupation, and meet this criterion of being (perhaps just as) difficult to reverse or halt, even when one desires to do so.

The difference between wanting to stop a habit such as listening to music in the morning and wanting to stop a habit of injecting heroin can be distinguished based on 1) the degree to which they harm the individual and/or others, and/or 2) the degree of difficulty one has in abstaining from the habit. At face value, it may be suggested that the morning music habit doesn't harm the individual or others, and is not too difficult to abstain from; by contrast, one would probably suggest that the heroin habit harms the individual (and likely harms others such as family members), and is extremely difficult to abstain from.

However, if we apply the first distinguishing criterion (degree of harm to individual or others), we meet the problem that harm depends on many factors including characteristics of the individual and the social/cultural/political climate at a given time. What if listening to music in the morning was causing the individual to be late to work? What if she insisted on listening to very loud music in the morning, harming her hearing and disturbing her neighbors? What if, when attempting to go without morning music, she became very frustrated and moody and had difficulties at work? Or in the case of the heroin user, what if she used a fixed amount of heroin each day, did not share needles, was financially able to support her habit, and lived in a culture where such activity was acceptable?

Appealing to the second criterion (the degree of difficulty abstaining) is also problematic. The degree of difficulty would seemingly be best understood on a spectrum, and it is not clear how or where to mark on this spectrum the cutoff point that distinguishes

addictions from habits to which one feels highly compelled to engage in. How difficult does abstaining from something have to be in order for it to be considered an addiction? It is also not clear how to ascertain whether the difficulty in abstaining is a normal, healthy response or a pathological one. For example, difficulty abstaining from protein in the form of animal products such as meat, cheese, and eggs would perhaps be considered healthy and normal in a culture where protein was considered an important part of a healthy diet. In a different society that was strictly vegetarian or vegan, difficulty not eating meat might be seen as an oddity or weakness, or even pathological. Members of this society may question an inability to adhere to a vegan diet, inquiring why the individual is so ‘addicted’ to meat.

How are we to deal with these nuances when trying to understand addiction and occupation? How are we to appraise the effects that various occupations have for human lives? I suggest that we discuss them in terms of constraint and flexibility.

Flexibility and Constraint: An Overarching Conceptual Theme

All occupations bring consequences to individuals who engage in them. These consequences are highly variable and complex, and can be observed at the macro (behavioral) and micro (neurological) level. At the macro level, the occupation of Olympic swimmer (for example) poses many behavioral constraints—the amount of freedom available to the Olympian to engage in other things is quite limited. The macro-level limitations that an occupation impose have to do not only with actual time constraints but also mental factors such as obsession with the occupation, or less extreme, feeling compelled to frequently engage in the occupation.

At the micro level, the organization of the nervous system—the salience of particular neuronal pathways, for instance—is considered to be the consequence of occupational engagement. The occupation of cellist, for example, is known to result in a

much larger portion of the cerebral motor cortex being devoted to the left fingertips (Rosenkranz, Williamon, & Rothwell, 2007) as well as greater neuronal pathways devoted to auditory perceptual distinctions (Koelsch, Schroger, & Tervaniemi, 1999). These neurological alterations pose various kinds of limits. For instance, the cellist is limited in the way she hears things—she perhaps cannot listen to a musical composition and *not* hear ‘like a cellist’. While we may be inclined to call this an advanced capacity rather than a limitation, the point being made is that occupations affect our neurological composition in specific ways that have implications for how we experience things.

But while all occupations impose a certain degree of constraint, some occupations, in addition to providing constraints—or even as a result of providing constraints—foster increasing flexibility. For example, the constraints brought about through regularly playing the cello also bring increased flexibility in the form of enhanced synaptic plasticity (Rosenkranz et al., 2007). In some cases, however, the constraints brought about by an occupation may not foster any future flexibility.

A degree of flexibility is generally valued in human societies, so we might consider activities that provide constraints *and* foster future flexibility to be valuable. By contrast, we might devalue activities that are extremely constraining and do not tend to foster any future flexibility. The ways in which flexibility and constraint can be used to make sense of human activity deserve further discussion, and will therefore be addressed with greater detail in chapters three and four. Presently, it is crucial to point out that while the concepts of flexibility and constraint can serve as guides for assessing the utility and desirability of various occupations, they must always be considered in relation to a particular socio-cultural, historical, environmental context. Taken outside of such a context, there is nothing necessarily inherently bad or problematic about reductions in flexibility. Thus even if addiction turns out to be defined as an occupation marked by reduced flexibility,

only if the environmental context requires or values flexibility will addiction (as so defined) be problematic.

Number and Diversity of Occupations

Perhaps a more interesting distinction can be found in the number of various occupations in which a person is engaged. If a person has many occupations, the degree of attachment she has to each will be less—she will not be solely dependent upon one or another as the only means for organizing her time, providing meaning, etc. Likewise, her neuronal organization will be the product of many different sorts of activities. However, if she only has one occupation, she will be wholly dependent upon it to maintain a sense of coherence, identity, and structure, and the activity's impact on neuronal organization will likely be profound⁹.

Here, it is important to note that the ways in which occupations can (profoundly) engender neurological effects (possibly, too, exaggerated reductions in flexibility) may vary. The profound, constraint-inducing effects of one occupation, for example, may differ greatly from the profound, constraint-inducing effects of another. Thus even if we were to define addiction as either 1) an occupation resulting in reduced flexibility, or 2) a state in which one exhibits a notably high degree of attachment to an occupation due to it being one's sole (or one of few) occupation(s), the 'addiction' would manifest in different ways in each case. There would not be one identifiable 'addict brain'. In other words, if an individual is highly attached to a particular occupation such that she is disinterested in other occupations, in addition to the obvious reductions in behavioral flexibility, this attachment may also impose excessive constraints at the neurological level. Yet, if two individuals are

⁹ There could be many reasons (personality, poor effectance (White), lack of motivation, life-experiences/influences, etc.) why a person would be inclined to have few or one occupation(s)

highly attached to two different occupations, both may be said to be addicted (if we choose to define addiction in this way), yet the posited neurological consequences of each are likely to be very different, based on their attachment of choice. Thus it would be futile to search for a common, underlying brain structure (as most neurological approaches do) to account for the addiction(s). Despite the differences in these two individuals, they may be said to have the commonality of an addiction, characterized by compromised behavioral and neurological flexibility and/or a high degree of attachment to a single occupation. Thus a neurological model of addiction *may* demonstrate a highly constrained nervous system, but the ways in which these constraints present themselves will likely be highly variable.

In summary, an occupational model of addiction redefines behaviors commonly thought of as addictions (e.g. regular heroin ingestion) in occupational terms and thereby helps to understand those behaviors in new ways. For instance, in this model, all activities are understood as a means for structuring human lives. Thus, like the cellist who needs to engage in playing the cello to bring enjoyment, structure, and meaning to her life, the addict, too, is seen as merely engaging in something that will bring these consequences.

Conclusions

A goal of this project is to articulate the meaning of occupation in human lives. Why is occupation so fundamentally important? In this chapter I suggested that addiction research is a good area to further articulate the meaning of occupation in human lives; because of the already apparent pervasive nature of addiction, bringing addiction and occupation under the same conceptual umbrella helps illustrate the similarly pervasive nature of occupation. I argued that addiction and occupation exist on a spectrum, and differ based on degree of attachment between the person and activity.

I compared Kielhofner's widely used (Lee, 2009) Model of Human Occupation (MOHO) (Kielhofner, 2002) to a general idea of addiction to illustrate preliminary reasons

to think that addiction and occupation belong in the same conceptual category. Having introduced what an occupational model of addiction might look like, I launched into a discussion of the current problems and debates about how to understand and define addiction. I first discussed the absence of the term in the DSM-IV-TR, the tendency to understand it as synonymous with the definition/diagnostic criteria of ‘substance dependence,’ and the problems that this tendency brings.

Following the natural progression of the debate of how to define addiction, I turned to cell and neurobiological studies, which promise to reduce the confusion by pinpointing identifiable biological factors that can provide a concrete illustration of addiction. I showed how the vast majority of these widely accepted approaches fail. Some posit that genetically realized less severe withdrawal symptoms correspond with preference for a substance and therefore with likelihood of addiction (e.g. Crabbe, 2006). Others posit that severe withdrawal symptoms are responsible for the perpetuation of addictions in an effort to ward off the extreme discomforts of withdrawal through continual ingestion of the substance (e.g. Gutman, 2006; Koob & Le Moal, 2005). In discussing these studies, I illustrated how findings produce conflicting interpretations. In addition, I argued that biological underpinnings for things such as alcohol preference or withdrawal severity offer little insight about addictions for the following reasons: 1) preference for a substance does not always lead to addiction, 2) addicts do not always have an initial preference for a substance, 3) substance use brings compensatory neuroadaptive changes, so absence of initial preference may be overcome, or initial preference may dissipate, and 4) there is reason to

believe that addiction is not the gradual result of use of a substance, so preference and ongoing use may be unrelated to addiction.¹⁰

After reviewing the genetic and neurobiological literature on addiction, I addressed the prevalent concern that my suggesting addiction to be an occupation is counterintuitive in that occupations are considered useful, healthy, and desirable where addictions are considered pathological. I offered a brief account of a philosophical anthropological understanding of human beings drawn from the work of Arnold Gehlen and others (see Gehlen, 1988; Moss, 2006; Moss & Pavesich, 2011; Pavesich, 2008). I then contextualized my claims by suggesting that addiction (and occupation in general) are compensatory strategies for dealing with the human existential and biological situation as articulated from a philosophical anthropological stance. Thus when I suggest addiction to be an occupation (and therefore imply it to be useful), I am referring to the capacity that addiction has to constrain our otherwise highly plastic and (dangerously?) underdetermined bio-anthropological situation.

I pointed out that much of the stigmatization of addiction rests on the tendency to limit our understanding of addiction to the ingestion of toxic chemicals. Through an example, I suggested the conceptual distinctions between occupations and addictions that are based on claims about the harms of addiction to be perhaps more ambiguous than previously recognized. In an effort to distance my argument from common stigmas

¹⁰ Here the neurobiologist of addiction would likely argue that ongoing exposure to a drug, say ethanol, results in observable synaptic changes that bring about tolerance and withdrawal, illustrating that addiction is, indeed, the consequence of chronic substance use. In response, I would like to again draw the reader's attention to a distinction between addiction as a broader concept with a more significant phenomenological component and substance dependence as a more value-free, physical phenomenon. Substance dependence and the consequences of chronic ingestion of toxins are clear and supported by the literature (e.g. Koob & Le Moal, 1997). However, I am arguing that there is reason to think of addiction as something different from substance dependence and/or the neurobiological consequences of exposing the brain to toxins. One reason to consider addiction as something separate is that the term refers to a much broader range of activities including those that do not involve ingestion of toxins (Potenza, 2006; Ross et al., 2008). Another is the testimony of many addicts that addiction was immediate, not gradual (Alcoholics Anonymous, 2001; Narcotics Anonymous, 2003).

attached to addiction (Buhler & Buhler) for the purpose of gaining insight regarding its fundamental nature, I suggested discussing the consequences of various occupations (addiction included) in terms of flexibility and constraint.

I illustrated that the sorts of occupations we choose to engage in have consequences and implications for the way we engage with our world as well as for our neurobiological and physiological structure. While there are reasons to believe that occupations we may denote as addictions result in reductions in flexibility at the neurological, mental, and behavioral level, I argue that our occupational choices are not strictly determined by neurological or molecular factors. Therefore, addictions can be seen as occupational choices which may be replaced if circumstances warrant. I suggested that addictions may occur as sole occupations where those employing numerous occupations may be less apt to be characterized as addicts.

Chapter Three Normatively Contextualizing Addiction and Occupation

Introduction

A purpose of chapter one was to introduce the concept of occupation as understood and utilized by the founders of occupational therapy. For this diversely-trained group of individuals, occupational therapy was a means for treating human ailments through occupational engagement. The idea behind occupational therapy was that dysfunction/disease was a problem experienced by whole individuals in environmental contexts, and was not identifiable in terms of de-contextualized, ‘problematic’ components of that individual. For occupational therapy’s founders (who were dissenters from physicians and the medical model), manipulations of de-contextualized components of the human organism such as surgeries or medical/pharmaceutical interventions were inadequate for achieving the necessary adaptations needed to restore or initiate health and/or well-being. Occupational therapy could help individuals realize health by allowing them to restructure the ways in which they experienced themselves in their environments, and this shift was achieved through ‘doing’—that is, through occupational engagement.

However, the vast influence of the expanding medical model led occupational therapy away from its philosophical foundations. I showed in chapter one how training and education for occupational therapists increasingly relied on reductionist, medical frameworks. Currently, because occupational therapists thrive on referrals from other medical professions, the discipline continues to be highly influenced by medical practice ideals. As quoted in chapter one, Betty Hasselkus’s reiterates the widely expressed sentiment that occupational therapy has “been in the position of struggling to define [itself] and to be successful in a world of medicine that focused on the etiology and pathology of health at the cellular level” (Hasselkus, 2001, p. 247). I concluded chapter one by

suggesting an occupational model of addiction, and in chapter 2 introduced this model along with its supporting philosophical anthropological presuppositions in attempt to illustrate the power of occupation (as understood by the founders of occupational therapy) in human lives. Ultimately, the model has implications for treating addiction that, I will argue, turn out to be an example of how occupational therapy as intended by its founders can be applied. However, in order to delineate how occupational therapists might implement an occupational model of addiction in the occupational therapy process, it is necessary to have an understanding of how and why addiction is problematic according to this model.

In chapter two I illustrated the contradictions and definitional ambiguities present in current models and conceptualizations of addiction. For instance, I argued that definitions of addiction (which inherently contain negative stigmas) are perhaps primarily reflections of changing cultural values. I argued that neurobiological research findings are inconclusive, and that the literature fails to provide any one concise and coherent definition about what addiction is. Because a coherent conceptualization is lacking in the literature, it is unclear how to approach the phenomenon of addiction for the purpose of treatment/intervention. My approach in chapter two was to first examine the ways in which addiction potentially served individuals. I sought to understand addiction not as an irrational illness or the behavioral manifestation of a (neurological) disease, but rather, as an attempt to function within one's given circumstances. In this vein, I introduced the occupational model of addiction.

In doing so, I first discussed some theoretical presuppositions, which included ideas stemming from 20th century philosophical anthropologists along with the 21st century notion of detachment (Moss). This discussion was to illustrate the crucial importance of

occupation as compensatory for the human situation. I then described an occupational model of addiction in which I highlighted some of the ways in which addiction (as an occupation) served individuals—that is, ways in which it compensated for the human situation of detachment.

Chapter two perhaps arose skepticism because I argued against pretty much all of the distinctions (most often normatively-derived) that delineated addiction, and then suggested that addiction (which generally has negative connotations) was an occupation (which has positive connotations). Perhaps more troubling than my assertion that something negative—addiction—could be understood as an occupation was the fact that I left the reader with no real distinction; I did not really show how addiction would be any different than any other occupation that one frequently engaged in or was very attached to. Thus, at first glance an occupational model of addiction arose skepticism because scholars and people in general intuitively want to say that there is something distinguishable and recognizable about an addict that differentiates her from one who is involved in and/or attached to a mere hobby or vocation. In chapter two I purposefully suspended normative judgments regarding addiction for the purpose of illustrating the potential occupational role ‘addiction’ plays in human lives. However, in doing so, I stripped the reader of any real distinction by subsuming addiction under the umbrella of human occupation.

Therefore, the present chapter—three— is about making normative distinctions between different occupations. The purpose of doing so is to address the intuition that addiction is harmful, but to account for this negative stigma in ways that are more satisfactory than those in the current literature (or to otherwise discard the stigma, and probably, likewise, the concept of addiction all together). Thus my intention in this chapter is to articulate a scale on which human occupations can be normatively contextualized—a

scale that provides a language for delineating why ‘addiction-occupations’ are harmful in ways that occupations in general are not.

But before launching into a normative assessment of what distinguishes addiction from other occupations, I want to point out that most labels deeming addiction to be problematic (and differentiable from other occupations on that basis) do not assess addiction at the level of human occupation but rather label smaller aspects of addiction such as neurochemical reactions resulting from drug use. In other words, the majority of normative assessments regarding addiction take place prior to the level of an analysis of the addiction as an occupation. For the same reason that reducing occupational therapy to reductionist medical practices resulted in a conceptual disservice (as described in chapter one), so too (as I will show in this chapter) has normatively assessing addiction at the cellular level resulted in conceptual confusion. I will argue that assertions about the harms of addiction based on many cellular-level analyses do not carry weight when held up to scrutiny. For this reason, ultimately I will argue that the basis for which we should ascribe normative value to addiction and other occupations must take place at the level of human occupation and nothing less.

My argument will unfold as follows:

1- First I will suggest that the negative stigma often associated with addiction, especially with regard to drug addiction, appears to come from the trend of associating drug use/addiction (the two tend to get used interchangeably) with general public health problems. Drugs are thought to cause problematic symptoms (that amount to 'addiction') which ultimately pose problems for societies. I will note that, while it may in fact be the case that drug addictions are problematic in societies, the roots of and logic behind such a claim need investigation, and the basis for ascribing normative value to addiction needs

justification. I will point out that the negative stigma attached to drug use/addiction may have merely emerged from stereotypes about the activities of marginalized racial groups; and further, that drugs may not be the cause of observed social problems in drug-concentrated societies. Thus the term addiction may have come to merely refer to activities not accepted by mainstream society. I will conclude that such a basis for deeming addiction to be problematic would clearly be unsatisfactory.

2- I will then address a claim made by a number of studies: that the above-mentioned unsatisfactory reasons for stigmatizing addiction are bypassed by instead asserting that addiction should be deemed problematic because of its correlations with purportedly harmful physiological states. Predominant models of addiction, for example, argue that drug addiction may rightfully be stigmatized as problematic if it brings overt, negative physiological and/or psychological consequences due to inherently harmful properties of the drugs in question. This is the view put forth by the disease model of addiction, which cites drugs' ability to hijack neurocircuitry, dominate attention, and get in the way of generally healthy behavior. In my critical analysis of this view, I will point out that in some cases (e.g. pain management), drugs can be used regularly without the proposed harmful effects. Taking this into account, it is arguable that drugs do not possess the proposed physiologically harmful properties in and of themselves.

3- The majority of literature responds to the above challenge by arguing that drugs only cause physiological harms leading to the addiction persona when mixed in the proper combination with certain genes and sociocultural environmental circumstances. From this perspective, the difference between those who experience physiological harm as a result of drug use and those who do not can be found in the genetic makeup of and/or the external influences imposed upon an individual. If the individual has a genetic predisposition for addiction and is exposed to environments thought to breed addiction, drug use will, from

this perspective, likely cause physiological harms such as the hijacking of the reward system and the consequent addict behaviors.

By contrast, I will argue from an alternative perspective that the difference between ‘addict’ drug-users and ‘non-addict’ drug-users has to do with whether or not use of the drug is one's occupation. The perspective I adopt deems it inappropriate to view genes in a decontextualized fashion as predisposing individuals toward macro-level psychological or behavioral manifestations. Further, it views human factors (genetic dispositions included) as manifestations that are always context dependent. In other words, it would be nonsensical, from the perspective I adopt, to suggest that environmental and genetic influences can be discretely conceptualized and then factored together in some sort of equation that demarcates their level of influence on an individual regarding the likelihood of her becoming an addict, such as is the case in the many models suggesting addiction is, for example, 40 percent genes and 60 percent environment.

I will argue that if something is an occupation for an individual, its effects are central and profound. Thus if drug use is an occupation for the individual, the drug in question may cause the harms proposed, for example, by the disease model. Crucially, according to my argument, it is occupational status that determines what goes on at the neuronal level, (i.e. whether the reward system becomes hijacked or not) not vice versa. Thus I conclude from my argument that the object of normative debate should be occupations, which are societally contextualized and incorporate all aspects of the individual.

4- The disease model's inclination to locate causes of addiction in the biology of individuals stems from presuppositions about the human organism. Thus to support my argument I will reemphasize the philosophical anthropological presuppositions of this

project in order to illustrate the ways in which these presuppositions differ from those of the disease model. I will remind the reader of claims that humans are born into a situation of lack, and that their lives consist of striving that is a response to this experience of lack. Taking this supposition into account, addiction shows up as a function of an already present need. Therefore, it becomes unnecessary to establish neurobiological etiologies to account for addicts' behavior. Such behavior can be seen as one of many sorts of attempts to deal with the human situation.

5- Finally, taking into account my argument that occupations should be the object of normative investigation, I will introduce the concept of 'focused flexibility' as a means by which we can normatively contextualize occupations. A normative assessment of various occupational endeavors through the lens of focused flexibility amounts to an examination of the degree to which an occupation fosters the focus/constraint needed for productive, functional human lives while maintaining the capacity to respond flexibly to and within one's world. Focused flexibility describes those occupations that provide humans with direction without resulting in behavioral and or psychological collapse.

Through this discussion, I hope to offer a conceptual framework through which we might better understand different occupational choices and their consequences for individuals, including but not limited to those occupations that, prior to the articulation of this framework, appeared to be irrational or disease-like, such as 'addiction'. Assessing occupations in terms of the degree to which they foster (or inhibit) focused flexibility can arguably serve as a guideline for conceptualizing some of the apparently problematic aspects of (some) human behaviors in general without relying on moralistic or empirically misinformed value judgments. A more in-depth discussion of the implications that focused flexibility and what I will ultimately call 'addiction-occupations' have for human well-being is reserved for chapter four.

Addiction, Drugs, and Social Problems

Most current research on addiction comes from the neurosciences. Research articles on the topic of addiction often begin by citing the public health costs/harms resulting from ‘addiction’. The articles then go on to discuss neurobiological findings purportedly related to some factors often thought to characterize ‘addiction’ and/or ‘addict behavior’, such as craving, compulsive use, and problematic withdrawal symptoms upon abstinence. These factors become the topic of a study and are assigned, through research, neurological correlates. In this way, neurobiological findings become linked to behavioral profiles related to public health issues; certain neurobiological dispositions are proposed to be causally linked to ‘harmful’ behaviors and are therefore assigned normative value. ‘Addiction’ as a concept becomes the link that holds together neurobiological features and broad characteristics of people in societies. The negative stigma surrounding ‘addiction’ appears to come from this trend of associating characteristics of addiction with general public health problems. It should be noted that findings linking addiction to public health problems are often drawn from studies on *drug* addiction. Drugs are thought to cause brain changes which, in turn, cause problematic symptoms (that amount to ‘addiction’) which ultimately pose problems for societies. Thus at times, stigmas that surround different drugs are difficult to separate from the stigmatization of addiction in general.

Stigmatizing Substances: Mainstream Cultural Bias

If use of a substance is causing crime, poverty, poor health, high mortality rates, and other societal and health problems, it seems that ‘addiction’ (loosely defined as ongoing, compulsive consumption) to that substance could be rightly deemed problematic, deserving

of its negative stigmatization¹¹. But Acker (2010) suggests that the negative images with which drug ‘addictions’ are generally associated may have little to do with actual problems brought about by the presence and use of drugs in a society and instead have more to do with a stigma in the US that “mainstream American population groups have attached to drug use outside of their social horizons” (Acker, 2010, p. 73). She continues,

Most of the psychoactive drugs that the US government has declared unfit for non-medical use first aroused concerns because of their associations with marginal racial groups. Images of opium-smoking Chinese in the late nineteenth century, cocaine-maddened African Americans in the early twentieth century and marijuana-puffing Mexicans in the 1930s fueled movements that culminated in passage of the Harrison Narcotic Act in 1914 and the Marijuana Tax Act in 1937. Moral entrepreneurs¹²...cast drug use as a threat to the national fabric; these attitudes, hardened into law, became the basis of American drug policy—which...has been tightly linked to addiction research (p. 73).

Acker suggests that the negative stigmas are a reflection of racist and/or ethnocentric fears about unfamiliar cultures and their activities.

Further, the problems that can occur in drug-concentrated societies may be due to confounding factors rather than drug use per se, such as financial, sociocultural/historical and/or political realities. This possibility will be addressed in detail in chapter four.

Interestingly, it seems to be the case that the very concept of ‘addiction’ is implemented to account for the condition in which a person desires to engage in activities that have been deemed unacceptable by mainstream societies. Notably, in other words, an activity (in this case, drug use) perhaps only becomes an ‘addiction’ by definition once it has already been assigned negative value. Thus, in Acker’s example, because mainstream American population groups view the use of certain drugs as ‘bad’, it comes to be the belief of that mainstream society that anyone who finds the need to use such drugs instead of engaging in

¹¹ When ‘addiction’ is referenced as the cause of public health problems, it is generally referring to drug use, which is not the same but is nonetheless often used interchangeably with the term addiction, especially to discuss societal problems relating to drugs. This interchangeable use has to do with the belief in addictive properties of drugs that threaten to lead the user to addiction.

¹² See Acker (2010) for citations of specific examples including Progressive Era vice reformers and aspiring politicians and bureaucrats such as Hamilton Wright and Harry Anslinger

some other, more acceptable activity has a problem—that is, an addiction. Such a basis for deeming addiction to be problematic is clearly unsatisfactory¹³.

Physiological Harm

Some would argue that the political origin of the negative stigmas attached to drugs is irrelevant if use of those drugs (and, de facto, addiction to them) poses overt physiological harm. From this perspective, assigning negative value and the label of ‘addiction’ to non-mainstream activities such as drug use would be warranted if use of those drugs turns out to bring about harmful physiological states. Physiological alterations brought on by addictions to drugs have been proposed to be harmful because they manifest as tolerance and withdrawal upon abstinence and thus cause the user to be enslaved to drug use, unable to quit using the substance. This enslavement then brings its own harms, such as declining ability to participate in family or work relationships, and/or declining self-care. To assess the merit of this perspective we must ask, do drugs have these characteristics? Does use of these substances lead to unrelenting continuous need for consumption (dependence) matched with poor health?

Most of the literature on drug addiction ascribes to the disease model (Madras et al., 2006) which would answer ‘yes’, drugs are inherently harmful because they elicit dependence followed by poor health. For instance, the disease model describes drugs as having the ability to “hijack” the dopaminergic reward center in a way that allows them to take over the individual, dominating her attention and serving as perhaps her sole source of motivation. More specifically, the brain disease model explains that:

¹³ Furthermore, here, addiction has little to do with frequency of use, or being overwhelming involved; instead, addiction here is viewed as mere engagement in a specific activity, and this view undermines the notion that addiction is a concept generally reserved to refer to compulsive, overwhelming behavior.

Addictive drugs are able to ‘hijack’ the reward system because while they act in a similar way to natural rewards, they produce an artificially intense, rapid and powerful positive response. The brain adapts to the presence of a drug, and synapses and circuits are remodeled, further increasing the reinforcing effects of the drug. This drug-seeking becomes rewarding in itself and prioritized over other beneficial goals (Keane & Hamill, 2010, p. 57).

Thus drugs are said to be harmful because they alter the brain in ways that are thought to produce a dependence that is not compatible with ‘healthy’ living; drug dependence purportedly leads individuals to disregard the need for self-care and concern for others because of those individuals’ heightened focus on drug-seeking and consumption.

However, Keane and Hamill (2010) suggest that, contrary to what the disease model would have us believe (Madras, et al., 2006), changes in the brain resulting from the long-term use of drugs are not, in themselves, pathological—that is, they do not necessarily lead to the behavioral profile mentioned above. Keane and Hamill support this claim by pointing to the successful use of narcotics in chronic pain management. Pain medicine, they note, is “clearly based on scientific understandings of drug receptors, neurotransmitters and the central nervous system,” yet does not ascribe to the brain disease model of addiction (Keane & Hamill, 2010, p. 54). “In the context of pain treatment”, they note, “opioids are not dangerous illicit substances but effective analgesics appropriate for long-term use...having low morbidity...a low addiction potential and an ability to enhance quality of life...” (p. 58).

Keane and Hamill argue that chronic pain patients regularly use substances purported to be responsible for pathological neuroadaptations, but that these patients behave very differently than those considered to be drug addicts. Unlike in cases of addiction in which the user purportedly becomes preoccupied with drug use while simultaneously becoming inflexible and unavailable in other areas of her life, the chronic pain patient uses drugs to relieve pain and return to the many areas of life that have been

neglected because of pain. Keane and Hamill note, “In the pain clinic, rather than drug use producing brain disease and consequent harms, it is drug use that enables normal functioning” (p. 58).

Thus it seems that in some cases, regular use of drugs produces neurobiological changes that are proposed to cause the behavioral characteristics of addiction while in other cases, regular use of drugs causes changes that relieve pain and result in healthily functioning human beings. Because both scenarios entail regular use of opiates, it cannot be the case that the observed ‘addict’ behaviors of some individuals are the result of intrinsic qualities of the substance alone.

While others have argued that the differences in drugs' effects on individuals have to do with genetic differences of the individuals, or that ‘addiction’ is the product of ‘risky’ genes and environmental factors combined, in the following section I will argue instead that the difference has to do with whether or not use of the drug is one's occupation. If something is an occupation for an individual, I will argue, its effects are central and profound, thus in the presently described case, drugs may cause the harms proposed by the disease model if drug use is an occupation for the individual.

Occupational Status

The discussion above illustrated that, in some cases, regular use of drugs seemingly produced neurobiological changes that were proposed to cause the behavioral characteristics of addiction while in other cases, regular use of drugs caused changes that relieved pain and resulted in healthily functioning human beings. What was the differentiating criterion that caused this discrepancy?

The obvious distinction seems to be that people with chronic pain can use the drug effectively to manage their pain while ‘addicts’ are people who do not have chronic pain

and are using the drug for some other purpose. The way in which one engages with the substance in question differs, and for this reason, the behavioral manifestations that result from the use of the drug differ. This difference, I suggest, can best be accounted for in occupational terms.

In my terms, we might say that the differentiating criterion is occupational status; the addict engages in the ingestion of drugs because drug use is her occupation where, by contrast, the chronic pain patient uses drugs in order to *return* to her occupation(s). For this reason, in the case of the addict (i.e. the individual whose occupation is drug use) the effects of drug use on the individual are substantial and central. By contrast, for the pain patient who has other occupations and for whom drug use is not an occupation, the effects of drug use are peripheral regarding her behavioral and psychological profile as a whole. Thus in the current example, the different effects that opiates produce in an individual lie in the nature of the relationship the user has with the drug; if an occupation, drug use provides temporal structure, values, and a source of motivation. If used as a medication, it is strictly to eliminate a problem and does not play the role of carving out a life space and identity for the user—it does not serve to motivate her, structure her time, and form her values and identity. If use is not one's occupation, it likely does not gain the salient role that has the capacity for attention domination and the onset of 'addict-like behavior' because it does not play a central role in that individual's identity. Thus it may be that some drugs are inherently harmful, but perhaps only if those drugs are used for occupational purposes. In this occupational model perspective, 'problematic' behaviors such as those diagnostic criteria for addiction mentioned above (lack of self-care and concern for others) arise when one chooses a 'problematic' occupation. In less normative terms, one's behavioral and psychological profile(s) mirror their occupational choices.

In short, the degree to which an individual's behavior will be affected by the activity in question (in this case, ingestion of opiates) can be determined on the basis of whether or not that activity is an occupation for that individual. Thus consequences stemming from use of the same substances (perhaps even manifested in neurologically similar ways) may greatly vary in their behavioral-level manifestations, depending on whether or not they are part of an individual's occupational profile. The important point to be taken from this suggestion is that the disease model supposes that human behavior is a consequence of microbiological alterations, differences, and/or manipulations and therefore, the disease model is more likely to consider certain brain states to be harmful (or beneficial). By contrast, from the perspective of an occupational model, substances and brain states are not objectively 'bad' (or 'good') because they are not the cause of behaviors; the same substances and brain states can correlate with different behaviors. From an occupational model's perspective, the ways in which individuals experience certain substances (and potential neurological consequences) result from and depend upon whether or not use of those substances is an occupation for the individual.

Crucially, the occupational model is unique in that it suggests that it is the status of being an 'occupation'—which is a complex state of human affairs—that determines what goes on at the neuronal level, (i.e. whether the reward system becomes hijacked or not) not vice versa.

Discussing human experiences including 'addiction' in this way—that is, in occupational terms—will be useful, I argue, in bringing together some of the insights from more reductionist approaches to defining addiction. This is because the concept of occupation incorporates *all* aspects of the individual, including but not limited to both neurobiological *and* environmental factors. Further, the model discusses these elements at

the level of human experiences. Because occupations play a central, defining role in the lives of individuals, occupational choices are of crucial importance, having profound implications for the way in which one experiences herself within a socio-cultural, historical, environmental context. In light of this, instead of looking at whether certain substances should be deemed as having positive or negative value (a task which will always reflect socio-cultural-historical contingencies), we can instead look at how various occupations (which incorporate the complexities of human affairs in a contextual situation) affect an individual.

Normatively assessing occupations (instead of substances or other small parts of a bigger picture) amounts to an analysis of the degree of cohesion existing between all relevant factors in a given, human situation. A normative assessment at the occupational level allows us to assess a wider array of elements, including but not limited to the role of an occupation within a person's life—its ability to motivate the person, its effects on that individual in terms of capacity for and efficacy in social/societal engagement, and its contribution (or lack thereof) to one's overall satisfaction with one's self and one's life. For this reason, I am arguing that the object of normative debate should be occupations, which are societally contextualized and incorporate all aspects of the individual.

Presuppositions

Before discussing the implications that various occupational choices have for human lives, I want to revisit the philosophical presuppositions of my argument, and contrast them with those of the disease model.

The occupational model differs from the disease model in its presuppositions regarding human nature. The disease model presupposes that humans are born into a homeostatic balance with their environments, and that their actions are geared toward maintaining that balance. From this perspective, addiction appears to be pathological.

Addicts engage in an unnatural act that neither serves to maintain balance nor fulfill any inherent, natural need. It is superfluous, seemingly irrational, and anomalous.

An occupational model, by contrast, presupposes Gehlen's (1977) notion that all humans are underdetermined, problematic, defective life forms (*mangelwesen*), requiring compensatory action for survival and well-being. He says:

Man is an acting being...underdetermined...a being who must form attitudes. Actions are the expression of man's need to develop an attitude toward the outside world...he must make something of himself. This process is not a luxury which man could forego; rather, his 'unfinishedness' is a basic part of his physical condition, of his very nature. In this sense man must become a being of discipline: self-discipline, training, self-correction in order to achieve a certain state of being and maintain it are necessary to the survival of an 'underdetermined' being (Gehlen, 1977, p. 24-25).

For humans, occupation is necessary in order to create a life in which one can adapt and survive in varying contexts. Based on the human situation as described, 'addiction' shows up as a function of an already (always) present human need. Addiction is one example of an attitude and subsequent action that humans undertake in order to make something of themselves—the action Gehlen refers to above as something humans, in order for survival, cannot forego. If, as suggested by Gehlen, we take ourselves as humans to be already in need, then we don't need a disease model to explain addiction—that is, we don't have to locate reasons for addiction in the biology of individuals.

What is called for, rather than a disease model with neurobiological etiologies, is a model which looks at resources for providing opportunities to have occupational compensations for the human experience of lack—opportunities that foster desirable outcomes. Thus the task of contextualizing various occupational engagements in normative terms requires an investigation of their consequences, and an inquiry into what constitutes desirable outcomes. I suggest that the concept of focused flexibility can serve as a

barometer for measuring the desirability of the outcomes of various (compensatory) occupational choices.

Focused Flexibility

Introducing what I refer to as focused flexibility requires an examination of the relationship between constraint and freedom. Constraints in the form of limitations, filters, and boundaries have the ability, I suggest, to foster the experience of freedom in the sense that they carve out manageable life spaces in which individuals can perceive and respond to their worlds in functional ways (this notion was introduced in chapter two). However, sometimes limitations can be overly constraining, thereby having the opposite effect, reducing or conflicting with the experience of freedom. While too much constraint can limit organisms' freedom, so, too can the absence of limitations, filters, and boundaries impede the experience of freedom.

In 'Detachment and Freedom', I will expand on these ideas. I suggest the term focused flexibility to emphasize that human freedom results from a balance between implementing limits/constraints (i.e. focus) and maintaining a degree of detachment (flexibility). History suggests that we are prone to error in either extreme direction. On one hand, we impose rigid, sometimes moralistic frameworks to constrain more 'animalistic' impulses, or throw ourselves into highly constraining work or drug addictions, which usurp any possibility of unaccounted-for time or possibility space. Leaning to the other extreme, we refuse to dedicate ourselves to any one task; we cry out against societal impositions, moralistic or otherwise, demanding freedom from any barriers that may impede the right to free expression or choice of action, and in so doing, fail to embark on any path of action, remaining ambivalent, paralyzed by detachment. The notion of focused flexibility highlights that detachment compensations that provide boundaries while

preserving a degree of detachment afford humans the ability to flexibly participate in the interchanges that occur in daily human lives.

In ‘Compensation’, I go on to discuss the ways in which humans implement constraints in their lives via various forms of compensation for detachment, and discuss the ways in which compensations can either foster or inhibit focused flexibility. Drawing on Kielhofner’s work, I underscore that human occupational engagement is an ongoing, bidirectional, and changing dynamic interplay between human and environmental factors in which focused flexibility may or may not be experienced at various times. While making some general claims, here, that focused flexibility is valuable for humans, the implications that focused flexibility (or lack thereof) have for human lives is addressed more thoroughly in chapter four. Finally, in ‘Neurogenesis and Focused Flexibility’, I draw some correlations between occupational level and neurological level findings through the lens of focused flexibility.

Detachment & Freedom

I have previously, in chapter two, discussed detachment (according to Moss’s detachment theory) as a kind of freedom—freedom from needing to respond to external stimuli in an immediate or prescribed fashion. Recall, detachment theory (Moss, 2006; Moss & Pavesich, 2011) suggests that the very thing that distinguishes humans from their evolutionary ancestors is an increase in internal degrees of freedom. What this means is that what allows humans to create societal values and engage in intricate social practices is their ability to step away from the immediacy of external (and sometimes internal) stimuli. Such cues are more attention-demanding and imminent in creatures with fewer internal degrees of freedom. As organisms gained in complexity they also gained freedom in the

sense that they could react in more than one way to environmental cues. Responses could vary and were less immediate.

This lack of determinate genetic structure brought with it more developmental options, higher degrees of epigenetic prerogatives, and an overall genomic and organismic under-specialization. Specializations became contingent, not hard-wired. But the loosening up of organismic determination had dangerous implications. Excess indetermination, without compensation, could be catastrophic because where organisms were previously occupied with the constant need to (and inability not to) respond to ongoing cues, more complex organisms as a whole were not driven to react immediately in any specific way, and lacked any program that defined for them the 'best' or most appropriate actions. While the cells that made up more complex organisms were still involved in this sort of tighter coupling, the organism as a whole was much more detached from any particular way of being. The more detached an organism was, the more it approached a sort of suspended, undifferentiated type of freedom that increased the possibilities of available action but was also paralyzing because response patterns were not defined. Thus detachment freed organisms from the need to respond in particular ways to environmental cues, but also created a situation that required compensatory action if organisms were to experience any ongoing sense of autonomy. Without compensation, organisms would be faced with catastrophes of indeterminacy (Moss & Pavesich, 2011).

Compensation

Because of detachment, we as humans can engage in vast numbers of socio-cultural practices and occupations (compensations) that require some distance from the ongoing flux of environmental stimuli (Moss & Pavesich, 2011). In fact, we are *required* to compensate for our detachment through action/occupation if we are to experience the sort of freedom I call focused flexibility. The ways in which we compensate for detachment

have an effect on the degree of focused flexibility we experience. For instance, some compensations may lead us to respond to stimuli in very strict, calculated ways, reducing our potential for spontaneity and flexibility. Other compensations may provide ways of acting that allow for more flexibility.

Failure to Compensate

Before examining some different ways in which humans may compensate for their detachment and the results of such compensations in relation to focused flexibility, I would like to address the question of why humans compensate at all, and what might take place in the absence of initiating compensatory action(s). One might suppose that not imposing limits and constraints through action would preserve a degree of freedom. But when we don't choose our own limits through action, we either fall into the paralyzing throws of detachment, or other constraints that are byproducts of the complexities of combined influences at any given moment occur naturally and serve as restrictive guides (to varying degrees). Thus even those who exercise a degree of ambiguity or lack of commitment to particular choices or actions are nevertheless constrained.

Whether we self-impose constraints or someone/something else imposes them on us, limits arise and, by naturally posing restrictions, influence our lives. However, there are reasons to believe that naturally arising, un-chosen restrictions do not allow for the kind of freedom (focused flexibility) that one may experience by actively choosing various compensations/occupations. For instance, it has been suggested in many disciplines (although not in these exact terms) that failure to choose ways in which to compensate for detachment may lead to depression and/or anxiety (Lambert, 2005). One may, for example, come to feel as though she is a victim of circumstance rather than an effective agent (Posatery Burke, 1977). Further, it seems likely that the un-chosen, circumstantial

constraints would perhaps be disorganized and/or lack meaning, therefore failing to serve as productive compensations for detachment, leaving one in a situation filled with angst and lack of personal definition. To sit in detachment without taking action would leave individuals paralyzed and unable to function in the human world. In order to have the freedom and flexibility to respond in various ways to stimuli, humans have to experiment with different sorts of actions; they are required to compensate for their detachment (Moss & Pavesich, 2011).

The Value of Focused Flexibility

If humans do compensate for their detachment, they can do so in a variety of ways which will have different effects on that individual's future experiences and sense of freedom. A central way in which humans compensate for detachment is through engagement in occupation. For an occupation to provide what I call focused flexibility, it must bring focus to the individual by giving her an orientation while structuring her time, identity and personal concepts. It must do all of these things without imposing too much constraint. That is—it must provide focus without being so constraining that it interferes with an individual's ability to be flexible in the face of the complexities that make up the fluid, changing, social nature of the human environment¹⁴. If an occupation can accomplish this, we might understand it as 'good'. By contrast, occupations that provide so much focus that they interfere with an individual's ability to respond flexibly to changing environmental conditions could be said to be problematic. In placing value in focused flexibility, I am suggesting that humans benefit not from one specific activity versus another but rather, any sort of activity that allows them to adaptively respond, sensitively and flexibly, within their environment.

¹⁴ The claim that the human environment is essentially social underscores the necessity of sociality in human development and is therefore applicable even in cases where an individual lives a comparatively solitary lifestyle.

Kielhofner on Focus and Flexibility

From an occupational perspective, human experiences of focused flexibility emerge from/as a dynamic interplay between humans and their surroundings throughout their lives. Kielhofner, without placing any inherent value on one occupation versus another, describes the bi-directionality of the ways in which occupational engagement brings focus (and varying degrees of flexibility) to human lives (Kielhofner, 2004, 2008). He conveys that one's personal experience of being human is the product of (and also an influence on) her occupational choices within a given context. People engage in various occupations to provide an internal organization and stable identity that shows up in one's thoughts and actions. Yet occupational engagement, he says, is not a static set of choices. It is not a strict adherence to tightly defined or prescribed ways of acting, but rather develops and changes throughout an individual's lifespan. Such developments, says Kielhofner, continually alter the three tenets of human occupation—volition, habituation, and performance capacity—in complex ways (Kielhofner, 2008). As these developments take place, “an alteration of some internal or external component contributes something new to the total dynamic, out of which new thoughts, feelings, and actions emerge” (p. 129). He goes on to say that “when these conditions are repeated sufficiently, volition, habituation, and/or performance capacity coalesce toward a new internal organization...[and]...ongoing interaction of the new internal organization with consistent environmental conditions maintains a new, stable pattern of thinking, feeling, and acting” (p. 126). Thus, for Kielhofner, occupational engagement is a means by which human beings engage with their environments in order to create a mutually conducive situation between individual and environment that is ever evolving. Individuals may experience different degrees of focused flexibility based on their choices and circumstances.

Kielhofner does not place value on one occupation versus another but rather talks about occupations as creating dynamic relationships between organisms and their environments. However, he *does* talk about the possibility that some occupations may be overly constraining, thereby impeding an otherwise natural fluidity and evolution of occupations through the passing of time in response to changing environmental circumstances. This proposition introduces the notion that some occupational endeavors may be inherently harmful in the sense that they impede a necessary aspect of human development/experience—the ability to fluidly adapt in an ongoing way. This will be discussed in greater detail in the next chapter. Here, it should be noted that while addictions *may* fall under the category of overly constraining occupations, so, too, might other occupations that are less obviously ‘bad’. Kielhofner offers the example of strict adherence to (narrow) cultural norms through acceptance of what he calls the “dominant cultural narrative” (p. 129) which requires one to live by prescribed norms. While these can foster a sense of competence and personal identity, they can also be overly constraining and hinder adaptation by ruling out possible occupational choices that may be more authentic or fulfilling for an individual (Kielhofner, 2008).

Neurogenesis and Focused Flexibility

I have argued that we should only address the normativity of addiction and other activities at the level of human occupation. However, it is worth examining the ways in which some neurobiological findings complement what we know about human occupation in terms of focused flexibility. We know that we need focus, and that focus allows for flexible action. We also know that without focus through action (compensation), we suffer. Relatively recent findings regarding the neurobiology of humans, specifically the ongoing proliferation of progenitor stem cells in particular areas of the human brain, correspond with these notions of focused flexibility.

For instance, studies within the past decade have shown that, contrary to previous beliefs, neural progenitor cells proliferate throughout the human life-span and form neurons, astrocytes, and oligodendrocytes (Nixon & Crews, 2002). The cortex and the hypothalamus of the adult brain demonstrate ongoing neurogenesis, as well as the hippocampal dentate gyrus (Scharfman & Hen, 2007). Illustrating ‘focused flexibility’, neurogenesis in these areas, it has been suggested, can be increased by learning and exercise, and could indicate a highly beneficial role for rehabilitation and/or psychotherapy because of their potential power to shape the development of nascent neurons to contribute to desired thought patterns or movements (Scharfman & Hen, 2007). Activities that decrease neurogenesis (e.g. chronic alcohol ingestion), are thought to impede one’s capacity for behavioral flexibility because such activities eliminate the potential to create and reinforce (through behavior) new neuronal pathways to support new behavioral repertoires.

New neurons in the adult brain, while purportedly fostering the possibility for increased neuroplasticity and behavioral flexibility, have limited life spans and do not survive if the organism continues to act out rote, behavioral routines. The survival time of new neurons, it has been suggested, can be increased by providing the organism with learning opportunities and enriched environments that potentially foster exploration and new behavior (Scharfman & Hen, 2007). Thus the implication is that ritualistic, narrow behavioral repertoires establish highly reinforced neural connections and pathways that do not require or make use of newly emerging neurons, and that new or less habitual behaviors are possible if one is interested in or exposed to situations that foster new learning and the development of new neural pathways. If one does not capitalize on the potential for new developments, newly generated neurons die. In this way, neurogenesis might be seen as

valuable on the basis that it (possibly) affords the individual the potential to be flexible and develop new behavioral patterns if and/or when change is desired. However, such neurons do not on their own produce behavioral flexibility, thus the reasons that human occupation and flexibility must ultimately be conceptualized at the level of human occupation are clear.

Regarding the 'focus' aspect of focused flexibility, in line with what I have previously suggested about the value of focus/constraint and the possible harms of too much plasticity, Scharfman & Hen (2007) point out that progenitor cell proliferation/neurogenesis is not always valuable and can, in fact, be harmful. They note that neurogenesis sometimes results in problems such as epilepsy when new neurons cannot be properly integrated into the nervous system (and life scheme?) due to the way they develop or migrate. Further, reducing neurogenesis through medications such as some anti-depressants and mood stabilizers has been thought to reduce anxiety and positively alter mood. The latter point suggests the possibility that the potential flexibility afforded by neurogenesis may cause anxiety and/or mood disorders. However, from my perspective, mere neurogenesis would not be the cause of anxiety and mood disorders. More likely, the failure to compensate for detachment through occupation would bring about the proposed results, which would correspond with a lack of integration of newly emerging cells.

The findings implicate the importance of engaging in occupations/activities/thought patterns that can help provide focus to newly developing progenitor cells to help reduce problematic development and migration of these neurons, and to help integrate them into a functional neuronal system fostering desired thoughts and behaviors. However, as mentioned before, the mere presence of neurogenesis of progenitor cells in adults does not promote engagement in occupation and therefore should not, in itself, be seen as an asset in creating focused flexibility. Rather, such neurological findings can be seen in conjunction

with occupational engagements as a human capacity to create and re-create situations in which focused flexibility may be experienced.

Conclusion

In this chapter I suggested that addiction, as a concept, has been used to refer to activities that lie outside the realm of what is acceptable to mainstream culture. In this way, the concept has been obscured from more common associations with compulsion, excessiveness, and pervasiveness and instead been used to define any activity frowned upon by mainstream attitudes and standards that an individual is incapable of foregoing. Mainstream culture has used this label of addiction to account for many public health problems in marginalized societies.

I suggested that drug use (i.e. ‘addiction’, from this view) is not the cause of observed public health problems in drug-concentrated societies, and that the problems these societies face may be due to abject poverty and marginalization and are the products of much larger societal and economic realities. In doing so I implied that addiction is used as a label and a scapegoat for social problems experienced in marginalized communities.

Deeming this an unsatisfactory and unwarranted means of labeling addiction as harmful, I examined the more frequently discussed claim that addictions are physiologically harmful because they engender neurological changes that drive the individual toward repeated, addictive drug use which can physically compromise health and get in the way of psychological and emotional health by interfering with healthier obligations to family and societal roles. I used the example of effective pain management with narcotics to show that ‘addictive’ drugs do not intrinsically have the power to take over the brain and propel an individual into an unhealthy lifestyle. I suggested that drug use may become overwhelming and thus potentially harmful if it is an occupation for the individual, and introduced the

concept of focused flexibility as a means for assessing different compensatory responses to detachment. Focused flexibility provides an unbiased metric for assessing normative health status of any occupation be it drug use or otherwise. In introducing the notion of focused flexibility, I suggested occupations that provide constraints while allowing the capacity for flexible engagement in the world to be beneficial.

Finally, I demonstrated that the notion of focused flexibility can be used to conceptualize what happens at the neurological or behavioral level. I underscored that normative assessments, however, should always take place at the level of human occupation, which is where neurological phenomena are contextualized.

Chapter Four Addiction, Human Sociality, and the Value of Focused Flexibility

Introduction

I have shown the need for a clear and accurate account of addiction within addiction research literature by illustrating the shortcomings and biases of currently prevailing models and research. I have proposed and supported an occupational model of addiction by describing a philosophical anthropology that demonstrates the human need for occupation, suggesting addiction to be a clear depiction of humans acting on such a need. I have suspended normative judgments regarding addiction in order to conceive this occupational perspective, and then offered the concept of focused flexibility as a means for normatively contextualizing various occupations—addiction included—in ways that do not rely upon the socio-cultural-historical biases that have shaped many other conceptual models of addiction.

In the latter part of this chapter I will provide a more in depth analysis of how, based on the construct of focused flexibility, addiction might be seen as a problematic compensation/occupation for the human situation of detachment. But first, in order to warrant serious consideration of an occupational model of addiction and the ways in which this model may affect changes in the realm of rehabilitative efforts, it is important to examine the question of whether addiction is actually experienced as an occupation. Doing so first requires a definition of occupation and a conceptual model detailing the ways in which occupations (broadly) are experienced by humans. Using such a model, experiences of addiction can then be compared to experiences of occupations in general. Findings emerging from an examination of the question of whether addiction is experienced as an occupation, it turns out, augment our understanding of the ways in which what I will call

‘addiction-occupations’ appear to compromise focused flexibility, specifically in the realm of human sociality.

To address the merit of an occupational model of addiction, I completed a qualitative study using a grounded theory approach to examine the research question, ‘Is addiction an occupation?’ I used Kielhofner’s Model of Human Occupation as described in chapter two to define occupation and conceptualize human experiences of occupations, and I used open-ended interview questions to obtain descriptions of first hand experiences of addiction. In this chapter I will recount findings of this study and their implications.

The data collected in this study showed addiction to serve occupational needs. For instance, addiction met the occupational needs of providing motivational drives, enjoyment, significant contributions to identity formation, the structuring of one’s time, and the development of roles, habits, and routines. However, despite these positive, occupational qualities that emerged in descriptions of the lived experiences of addiction, a majority of the participants noted addiction to correlate with a sense of isolation and loneliness. An emergent theme was that addiction decontextualized the person from her socio-cultural environment and that this estrangement was perceived as and/or experienced by the addicted individuals as undesirable or ‘unhealthy’. So while fulfilling many occupational needs, ‘addiction’ was experienced as problematic in terms of its seeming correlation with inhibiting socio-cultural interconnectedness.

This reference to social connectedness seems to be a major distinction for separating health from illness: health is associated with being connected within a culture and wedded to some form of occupational engagement within that culture. Occupational engagement is thought to be something that allows one to be part of a culture because of the identity and roles that occupational engagement affords within that culture. But engagement in (the occupation of) addiction did not seem to cultivate this socio-cultural connectedness. As

already mentioned, addiction seemed to correlate with a felt separateness/isolation which is associated with disease and is a defining characteristic of many kinds of personality and mood disorders (DSM-IV-TR).

Because of the pervasiveness with which the concept of isolation has emerged in relation to addiction (Fernandez, 1976; Heyward, 1993; Schmid, 2009) and the corresponding notion that social connectedness fosters health and well-being (Bond et al., 2007; Cohen, 2004) the latter sections of this chapter explore these concepts as they pertain to human experience in more depth. I will propose a relationship between detachment (Moss) and a particularly human sort of sociality/interconnectedness. I will suggest that addiction-occupations *over* compensate for detachment and correlate with a different sort of human experience that is more isolated in nature. I will distinguish two different types of isolation in order to clarify what I mean by a ‘human sort of sociality’. While it may be the case that certain occupations are frowned upon by mainstream society and therefore lead to societal exclusion and a sort of social isolation, this is not the sort of isolation I will focus on as notably distinguishing addiction-occupations. By contrast, I will suggest that addiction-occupations result in a *felt* isolation that can occur regardless of whether one is surrounded by people or not. While societal exclusion may certainly contribute to this latter sort of ontological, felt isolation, it is not a necessary precursor. One may be accepted by a society of people and still feel unable to connect with others (as, I will argue, is often the case with addiction). Likewise, one may feel connected (that is, *not* experience ontological isolation) even without being amongst other people (as in the case of an author who lives in a remote area but feels connected to others through her writing, or through spirituality, for example). Thus, I will argue, when people are not engaged in addiction-

occupations, they need not be surrounded by others to experience a sense of social interconnectedness.

In the latter portion of this chapter I will discuss Bruce K. Alexander's recent work (2008) in which he defines addiction in terms of its relationship to being socially or culturally (dis)connected. Alexander, in his 'dislocation theory' of addiction, suggests addiction to be the product of modernization and the resulting disenfranchisement from cultural or communal connections. I advance Alexander's argument by discussing his theory in terms of detachment-compensation and the value of focused flexibility. Alexander's discussion of the relationship between modernization, dislocation, and addiction is rooted in a historical perspective of cultural shifts, where mine is rooted in specific presuppositions about the human biological situation. Couching Alexander's theory of addiction in terms of the earlier-proposed 'detachment theory' and its philosophical anthropological presuppositions allows us to analyze developments in the ways that humans compensate for detachment as they are reflected by unfolding socio-historical trends in terms grounded in biological and anthropological foundations.

As described, the present chapter will unfold as follows:

1-Is addiction an occupation? Findings.

2-Addiction and Isolation

Is Addiction an Occupation?

In this section I will describe a qualitative study that investigates whether an occupational model of addiction accurately depicts the first-hand experiences of addicts. The study provides preliminary evidence that addiction is, in fact, experienced as an occupation. It also offers an introductory discussion regarding the relationship between addiction, isolation, and social connection (or lack thereof). An in depth discussion of these concepts and relationships will be reserved for the latter section of this chapter.

Before further discussion, it is worth pointing out that this study primarily addressed stereotypical addictions (to drugs/alcohol). While this perhaps seems inappropriate given the nature of the current project and its emphasis on viewing addiction on a much broader scale, it was important that the study about to be discussed focused on more conventionally recognized addictions; it would have been problematic to interview individuals with unconventional ‘addictions’ (that are more readily considered mere occupations) and then make the claim that addiction is an occupation on the basis of such findings. For the purpose of the qualitative study it was important to show—if supported by the collected evidence—that even the most conventional addictions (such as to drugs) bore resemblance to human occupation.

In the study “Is Addiction an Occupation?” ten addicts participated in semi-structured interviews that inquired about the ways in which addicts experienced their addiction(s). A constructivist grounded theory approach was used to analyze emerging data, which was then discussed in relation to Kielhofner’s (2008) Model of Human Occupation (MOHO). Recall, Kielhofner’s model emphasizes the complexity of human occupation and its role in human experience, “focusing on the motivation for occupation, the patterning of occupational behavior into routines and lifestyles, the nature of skilled performance, and the influence of the environment on occupational behavior” (Kielhofner, 2002, p. 2). The main tenets of the model are that 1) human occupations provide volition for ongoing occupational engagement by contributing to/creating a sense of personal causation, values, and interests, 2) occupations structure one’s time into habitual patterns and routines, creating roles by which individuals recognize themselves and are recognized by others, 3) occupations create and refine individual performance capacities, and 4) that occupations and environments are dynamically intertwined in bi-directional relationships

through time (Kielhofner, 2002, 2008). The study “Is Addiction an Occupation?” concludes that the data provides evidence supporting the relevance, validity, and potential usefulness of an occupational model of addiction.

Research Design

Because this study is concerned with theory construction (proposing an occupational model of addiction) and verification, I used a grounded theory approach, “the most influential paradigm for qualitative research in the social sciences today” (Patton, 2002, p. 124). Patton (2002) claims that when existing models are bumping up against blocks of some kind—when their theoretical constructs are insufficient to account for the relevant empirical facts—an inductive strategy for new concept development is called for. While deductive studies generally draw from and test a priori concepts already assumed in existing theories, an inductive approach must be used when these theories may be restricting or preventing the potential for new insight and utility, as I have suggested to be the case in research on addiction. Furthermore, grounded theory relies on methods in which the researcher is informed by up close and personal empirical information, as in this study which relies on first-hand experiences of addicts. I hypothesized that this approach would be helpful in gaining insight regarding the nature of addiction, unlike the many theories of addiction that are far removed from the lived experience of addicts, deducing information from animal models and experimental results of neurobiological/neurochemical manipulations.

This study was grounded in an assessment of actual experiences and perceptions of addicts, obtained through semi-structured interviews. The use of open-ended interview questions permitted participants to describe what was meaningful and salient regarding their experience of addiction without being restricted by or confined to pre-ordained categories that often accompany discussions of addiction. Respondents were free to speak

of their addiction in ways that made sense in light of their own experience instead of trying to fit themselves to externally provided definitions and diagnostic criteria. After completion of interviews, patterns, themes, and/or categories to describe addicts' experiences of addiction were established through inductive content analysis (Charmaz, 2003). From this information, preliminary theoretical propositions were suggested and then compared to data for accuracy. Finally, the implications of a preliminary conceptual model of addiction were examined and articulated, based on the results of this study.

Study Participants

This study was approved by the IRB—number 1005-85B—on July 6, 2010. As a constructivist grounded theorist, my approach began with a central problem (the problem of conceptualizing addiction), which served to define suitable participants for the study (see Charmaz, 2003). I used purposeful sampling to interview individuals diagnosed (by self, institutions, or others) as addicts and also snowball/chain sampling to obtain more participants. While I interviewed participants with different kinds of addictions (e.g. to drugs, alcohol, food, gambling, sex, etc.), they all had a primary addiction to drugs and/or alcohol. I continued interviewing until saturation from the sample population was reached. As stated by Charmaz, “saturation tends to be an elastic category that contracts and expands to suit the researcher’s definitions” (Charmaz, 2003, p. 320), thus I continued with the initial round of interviews until I ceased to get any data that further enhanced analytic concepts for content analysis. No new concepts were emerging from the population interviewed when it was determined that, for the currently available population, saturation had been reached.

Instrumentation

I used a self-created questionnaire to guide semi-structured interviews. In implementing grounded theory, it is suggested that it is important to begin with an area of interest (addiction, in this case) and to develop preliminary interview questions that aim to invite deeper inquiry in the problem (Charmaz, 2003). Initial questions, according to Charmaz, are meant to invite further inquiry by expanding the problem and raising new questions. This sequence is repeated several times if necessary, which “keep[s] researchers close to their gathered data rather than to what they may have previously assumed or wished was the case” (Charmaz, 2003, p. 312). Initial questions inquired about personal experiences, and participants were asked to answer from the perspective of their addict-selves if currently recovering or abstinent. Questions stemmed from the core tenets of MOHO, including volition, personal causation, values, interests, habituation, roles, performance capacity, and dynamic bi-directional interactions with environment(s). For instance, the questions asked participants what they enjoy, how their time is structured, what they value, etc. (see Appendix for the list of interview questions). These questions aimed to examine whether addiction(s) provided the things that Kielhofner says occupations provide without directly asking the person to talk about addiction. This approach aimed to uncover descriptions of the *experiences* of addicts rather than eliciting any preconceptions or analyses that addicts may have had about addiction. It should be noted that constructivist grounded theory application falls on a spectrum from ‘emergent’ grounded theorists to ‘theoretical sensitivity’ grounded theorists. This study falls under the latter category, which not only allows room for the theoretical perspectives of the researcher(s), but further, argues that such biases are always present and should therefore—in order to uphold veracity and rigor—be acknowledged and made transparent rather than muted and suppressed. This view is also upheld by a school of thinkers in hermeneutics (e.g. see Stent, 1986).

This study contains many variables—age, duration of addiction, type of addiction, status (still addicted, in recovery, etc.), and differences in personal experiences of addiction as well as perceptions of the role that addiction has played in the life of the individual being interviewed.

Data Management and Analysis Procedures

Interviews

Grounded theory researchers generally begin data analysis from the initial stages of research and continue analysis alongside subsequent data collection (Charmaz, 2003). As already mentioned, in managing and analyzing data, I used a “constructivist” grounded theory approach as detailed by Charmaz (2003), which “view[s] data analysis as construction that not only locates the data in time, place, culture, and context, but also reflects the researcher’s thinking” (p. 313). Thus I began with a concept of occupation (Kielhofner, 2008) which shaped the form of interview questions, yet questions were structured in a way that invited open expression of personal, subjective experiences. Therefore, the data collected through semi-structured, open-ended interviews was a product of both the shape of my presupposed conceptions/knowledge about occupation as well as the phenomenological experiences of addicts.

Coding

Coding occurred in two phases. The initial coding process took place alongside data collection, and sought to recognize salient concepts and categories as they emerged. This method of beginning the coding process early is suggested by Charmaz (2003) in order to avoid the temptation of placing people into simplistic categories. This simplistic categorizing, Charmaz tells us, is more likely to occur if coding takes place after all data is collected because of the natural tendency to divvy up content into neat categories. Initial

coding, he says, “forces the researcher to begin making analytic decision about the data” (p. 320). Thus initial coding was ongoing throughout the data collection process. Data was sought until no new codes were emerging from interview responses.

Selective coding, which follows initial coding, is the process of sorting, synthesizing, and conceptualizing the most frequently appearing initial codes. This process began after interviews were completed. Selective coding allows the researcher to view participants as moving between categories, and fosters a more complex understanding of data than would be possible if limited to simpler coded categories (Charmaz, 2003).

Theoretical Sampling

After a set of relevant selective codes for explaining data was reached, theoretical sampling using comparative methods was implemented to construct themes and a theoretical framework. Theoretical sampling is the generation of a sample of theoretical constructs and then continually examining the data to test these constructs and eventually develop themes that reflect the data. Finally, the constructed themes informed the generation of an overarching theoretical framework.

In addition to performing early initial coding which, says Charmaz, helps assure objectivity (Charmaz, 2003), objectivity was further increased by undertaking theoretical sampling near the end of data analysis as opposed to at the beginning. While Strauss (Charmaz, 2003) suggests beginning theoretical sampling early in the research process, Charmaz says that “theoretical sampling undertaken too early may bring premature closure to the analysis” (p. 325). More importantly, early theoretical sampling, according to Charmaz, may force data into conceptual categories, thus introducing unnecessary bias.

Demographics

Ten participants were interviewed in this study, all living in Indiana. All but one had either been exposed to or were active members of Alcoholics Anonymous (AA). All

participants reported to be addicted to alcohol. Eight of the ten participants had multiple addictions. Three reported being addicted to sex, two to marijuana, two to inhalants, two to food, two to amphetamines, and one to crack cocaine. In addition to AA, nine of the ten participants had some other form of treatment exposure. Other forms of treatment included individual counseling, detox programs, inpatient and outpatient addiction treatment programs, and general hospitalizations. Two participants had also been exposed to other twelve-step treatment programs derived from AA, including Narcotics Anonymous and Overeaters Anonymous. Participants ranged from age 24 to 75, and the reported length of their addiction ranged from 2 to 60 years, with abstinence/recovery durations ranging from 0 days (still actively engaging in the addictive behavior) to 31 years. The demographics of this study are listed in table 1.

While an occupational model of addiction seeks to step away from the drug/alcohol-centric view of addiction, it was deemed important that this study interviewed individuals with recognized (stereotypical) addictions to avoid the pitfall of interviewing individuals supposedly addicted to occupations that are not conventionally considered to be addictions and then claim addiction to be an occupation on that basis.

Findings

Initial Coding

During initial coding, one other researcher and I independently read interview responses and noted salient concepts. The two of us then came together and combined these concepts. As new interviews were read, new salient concepts were added. Participant responses were examined to identify whether any of the previously noted salient concepts were mentioned in the present interviewee's responses and whether previously read interview responses contained the newly identified salient concepts. No new salient

concepts emerged in the last four of ten reviewed participant responses, so the remaining four participants' responses were tallied within the already existing concepts.

This process yielded 56 salient concepts. One conceptual category—"ability to fulfill roles other than 'addict' during active addiction"—was added to be compared to an already present salient concept, "ability to fulfill other roles during abstinence", and all interviews were re-read to identify the presence or lack thereof of this final concept. Then the participants who mentioned each of the salient concepts were counted, summed, and documented in table 2.

Selective Coding

During selective coding, the four categories of 'having other valued activities when abstaining', 'having other sources of enjoyment when abstaining', 'having other interests when abstaining', and 'having other roles when abstaining' were reduced to one category because of similarity and because tallies of participants' responses in each of these four categories were identical. The same was true for 'having other roles in active addiction' and 'ability to fulfill other roles in active addiction', thus they, too, were combined. This left 53 total concepts. Those concepts mentioned by at least half of the participants (five or more) were recorded in table 3 (20 total concepts) and reviewed in further depth by the research team, which consisted of myself, the secondary researcher, and a third researcher, in preparation for content analysis and theoretical sampling. Data was also examined by the research team to determine if any other themes emerged from less frequently appearing concepts (mentioned by 4 or less participants).

Theoretical Sampling

The 20 concepts derived during selective coding were reviewed by me and the two researchers who assisted in the coding process. These concepts were initially organized into 5 categories: connection, locus of control, identity, motivation, and habituation.

However, subsequent content analysis of interview responses revealed the categories to be insufficiently reflective of the data. Reviewing interview responses helped to gain a clearer picture of sentiments, context, and underlying meanings of various statements that had given rise to concepts during selective coding. Taking these deeper meanings of the data into account, ‘coping/escape’ and ‘penetration’ were added to the list of categories, and some concepts were rearranged under different category headings. The concept ‘longing for, obsession/preoccupation with, and/or craving object of addiction’ was changed to two concepts, ‘longing/desire’ and ‘obsession/preoccupation with, and/or craving object of addiction’. The seven final categories are listed in table 4 along with the selective coding concepts that led to the emergence of each category.

Operationalization of Themes

Connection

The category ‘connection’ was created to reflect an apparent (complex) relationship between addiction and isolation. A number of interview responses indicated that engagement in an addiction aided self-expression and fostered the ability to connect with others in one’s environment: “I had trouble expressing feelings. I was initially as hooked on drinking helping me with those things as I was eventually on drinking physically” (Juliet, age 24). Another noted, “Using was the best way to sort of allow some authentic me” and “I get pretty determined after using to establish some hard core bond” (Nanda Sue, age 30). Addicts reported an experience of feeling more connected to their surrounding (social) world(s) as a result of engaging in the addiction. “Using shortened the gap—I felt ‘a part of’ rather than ‘apart from’” (Leo, age 26). Yet despite this reported experience of connectedness, there also emerged a strong correlation between addiction and isolation: “All I do is use, and smoke cigarettes, and sit around and isolate...it’s not social” (Edward,

age 35), and conversely, a correlation between sociality and recovery: “I’m a little afraid to isolate [in recovery]...I seem to be better whenever I’m out talking to people and doing stuff...I loved using...now I enjoy socializing...something that I hated doing during my using” (Edward, age 35).

That addicts reported addiction as aiding connectedness while simultaneously associating addiction with isolation suggests the possibility that the experiences of connection or cohesion via engagement in addiction did not adequately establish a sense of connectedness within one’s world(s). The data suggests that addicts forge relationships with others. As one addict described, “I would be whatever I thought would make me more attractive to whatever person or whatever group I was with...it really didn’t make any difference what that required...I did it” (Katie, age 65). This statement suggests the possibility that engaging in an addiction is an aid that helps one fit herself into a role that will perhaps allow for social acceptance or connection, but a connection that is forged and therefore ends up being only illusory. One participant noted, “I put on a façade just so people wouldn’t ask questions” (Juliet, age 24), and another said “image management...my life was tied up in working hard to manage what people think of me” (Katie, age 65). The notion that forged relationships in addiction prolong experiences of perceived or real isolation is mirrored by the repeated tendency to link recovery from addiction with social connection and honesty: “I think the most important thing [for recovery] is honesty” (Bill, age 75); and “Nowadays [in recovery] I lead a much more transparent life...I mean, if you know me, you kind of know everything. There isn’t a secret hidden time from five until I pass out that nobody should know about...I don’t have to spread kitty litter on things because somebody might get too close and find out what I’m really like” (Katie, age 65).

Finally, the continual emergence of the theme of connectedness may suggest that addictions are attempts to compensate for an already felt separateness from others or the

world. This perceived estrangement may be more acute in potential addicts, or alternatively, it may be the case that addicts have not, aside from their addiction(s), found ways in which to engage with the world that can alleviate perceived or real experiences of separateness from others and the world where other, 'non-addicts' perhaps have. This could be due to social, political, and/or other factors that have hindered certain, satisfactory kinds of participation, leaving an addiction to be perhaps the most reachable possibility for these individuals to construct lives for themselves.

Locus of Control

The category 'locus of control' was developed to comprise data reflecting the continuum on which, at one end it is believed that one's addiction and its consequent actions result from factors outside of the individual's control, and on the other end, it is believed that one's actions are under one's own control and engaged in so as to maintain that control. This category is not unlike Burke's (1977) discussion of 'pawn versus origin' in which an individual experiences either a high degree of personal autonomy (origin) or feels controlled by external, factors (pawn).

Addicts expressed feeling that their addiction was brought upon them by factors they could not control and that, once addicted, their actions were under external control (under the control of the addiction, which was separate from their own will). It should be noted that in these cases, 'external' factors at times referred to things lying inside the individual but still experienced as external, such as one's genetic make-up, or engrained features of one's personality that resulted from one's upbringing. For instance, one addict noted, "I was raised drinking—we were a red wine family" (Nanda Sue, age 30); and another, "I think it's just something inherent in my personality...like a sickness that I have" (Jill, age 30). Another stated "you're a slave to the addiction" (Andrew, age 38) and yet

another, “when I was using, I didn’t have choices. Everything I did was dictated by my relationship with my substance of choice” (Sandy, age 34). While these quotes carried negative undertones, turning over the locus of control to an external factor was not unanimously perceived in a negative light. Some addicts reportedly liked giving over control of themselves: “when I’m using, I feel a little less in control, which is good because I’m always trying to have everything under control” (Angie, age 27).

On the other end of the spectrum, some addicts wanted to maintain control over themselves and their experiences. They felt that this could be achieved via engagement in their addiction. They controlled their mood, for instance, via taking a substance: “I feel more control over my feelings if there is something tangible and immediate I can take” (Leo, age 26). Thus the category of “locus of control” incorporates the idea that addiction can be experienced as either 1) fostering a sense of control that is reportedly desired, 2) fostering a lack of control that is reportedly desired, or 3) fostering a lack of control that is reportedly not desired.

Penetration

The category ‘penetration’, here, is intended to refer to the degree to which an addiction pervades one’s life. An addiction would have high penetration if it were life consuming—that is, if its presence in one’s life were pervasive, entrenched, and constant. The category was created to comprise five emergent codes that, it was thought, would indicate *low* penetration, such as ‘having and fulfilling other roles in active addiction’, and ‘has future-aimed goals outside the realm of and/or despite their engagement in active addiction’, for example. An ability to continue to engage in other responsibilities and/or activities during addiction was seen, initially, as an indication that the addiction in question was not highly pervasive and consuming—that is, it was seen as having low penetrance. If,

by contrast, all other areas of one's life faded away during active addiction, the addiction would be understood as having high penetrance.

A number of statements reflected high penetrance. One notes, "I would get up, use, and maybe go to bed...I mean, you know, especially toward the end, that's all I did" (Andrew, age 38). Another, "I lived and breathed and died to use" (Juliet, age 24), and yet another:

Take maybe a 24 or 48 hour period where, um, I start drinking at night usually...evening...and once I start, I drink 'til I pass out, um, and there's really nothing else that I do...you know...all I do is drink and I smoke cigarettes and uh, sit around...eventually I pass out and wake up. If I drank enough liquor the night before and I still have it in my system then I want to continue, which would have been pretty typical. So I would continue, pass out, and that cycle continues essentially until I fall asleep with not enough booze in my system to wake up still trashed...or 'til my body starts rejecting it. Um...and I miss work. But when I'm not caught in a cycle of drinking I enjoy soccer...play a lot of soccer...really anything outdoors, kayaking, mountain biking, running, physical activity, hanging out with friends, talking, family...that's about it (Sandy, age 34).

These quotes reflect a common characterization of addiction as being in conflict with other occupational engagements. Yet, contrary to common belief that addiction would always yield high penetrance and thus little ability to engage in anything else, the data suggested that one *could* engage in a number of other activities and responsibilities and still be deeply entrenched in addiction, as reflected by the following quote: "From the outside it looked like I was a pretty functioning member of society...um...I was the only one who knew how bad my addiction was, and I didn't think of it as addiction" (Edward, age 35). This phenomenon of engaging in addiction as well as a number of other activities is perhaps most clearly reflected within the following category, habituation.

Habituation

As just mentioned above, data analysis revealed that addicts were able to carry on their addictive behaviors while still attending to various aspects of their lives such as school, work, and contact with family members, as illustrated in the following addict's description of a typical day:

At the height of my huffing I was doing a minimum eight cans a day. I was working fulltime plus, I was, um, tutoring high school kids in math, I was seeing my mother twice a day...or...not daily but I was seeing and talking to my mother on a regular basis, um, but so, I would...I worked third shift so I would get home at seven in the morning, do about three cans of air duster, throw up, pass out, not necessarily in that order, wake up about an hour before I had to get ready for work, go ahead and shower, get cleaned up, grab a can, do it on the way to work, and then while I was at work I would do another can, perform my work duties, go home and pop and usually on the way I was stopping at an electronic store to get two cans or Walmart to get another two cans. I worked on one side of town and my mother was on another side, and I knew every Walmart and electronic store and I would stop at each on and get two or three cans and stock up (Juliet, age 24).

The category of 'habituation' includes many cases, like this one, in which addictive behaviors have become so engrained and embedded within an individual's lifestyle—that is, habituated—that they merely make up part of the background activity that structures one's time and existence so as to foster a recognizable daily or weekly life pattern/routine with concomitant roles and an ongoing identity.

The category of habituation is also meant to bring forth data illustrating cases in which addictions are engaged in merely because they are habits—"It was just the thing I was accustomed to" (Edward, age 35)—rather than for other reasons, such as, for example, to fulfill an urge or experience pleasure, connectedness, or relief. Illustrating one such case in which habit dictated the actions of one's addiction, the following is one addict's response to the question of whether or not he enjoyed engaging in his addiction:

I think there was enjoyment...I don't know...that's really hard to say for me because I...it was just so much a part of my life for, you know, those few years where, um, I was really using a lot...um...that it wasn't something that was like a special occasion 'fun'...it was

just something that I did everyday...I mean, I got home from work and I...the first thing I did was use (Edward, age 35).

Identity

The 'identity' category emerged as addicts spoke of their addiction as a means by which they self-identified: "I think it is largely part of who I am" (Jill, age 30). Data falling within this category also included cases in which addicts referred to their addiction as part of the construction process of a developing self: "It just seems like my whole addiction is just a small step in discovering who I am and continuing that process" (Juliet, age 24). Addiction was described not as something separate from self that had an impact on everyday life, but instead as something inherent, inseparable, and self-defining: "I think addiction was just me...my 'thing'" (Sandy, age 34).

Motivation

The term "motivation," here, is used to refer to a very fundamental affective element—a push toward action, an internally felt drive, the experience of being moved to act. During data analysis it became clear that addiction provided an impetus for acting. Addictions created drives. Using a drug, for instance, created an urge or need to use it again. In an ongoing way, addictions thereby moved addicts toward continual action. Addicts described an affective element—motivation—that was viewed and experienced in a positive light and that was brought forth via engagement in addiction. For individuals who provided data that fell under this category, engaging in the addiction was what motivated them to get out of bed, to get through the day, or to go through life in general. One individual described how she would alter her addiction habits to maintain its 'motivating' effects: "If it wasn't fun I probably wouldn't have kept up with it. When it

didn't get fun that's when I had to change drugs, change people, change...um change treatment facilities. I did have a lot of fun" (Juliet, age 24). Another described what 'got him going' on a given day: "when I would score...the dope or whatever, and you know, do that first bump or that first hit and then, you know, all bets were off and the game was on" (Andrew, age 38).

Coping/Escape

The ways in which addicts described engaging in their addiction as a means of coping with or escaping from life fell under two subsets. Some sought to escape from their own thoughts and feelings: "For me, to be an addict is to be addicted to anything that helps me not feel icky feelings...I needed to find something that made me not feel feelings" (Jill, age 30). Or, as another put it:

Why did I huff? It numbed me. It...I didn't want to think, I didn't want to feel. I just wanted to be completely numb. Inhalents...it was like shutting down your brain, and then you would just hear like 'wawawawawawa' and if you spoke you could...you would sound like a chipmunk. Then I'd black out. I wanted my brain to shut off and black out was the best way to do it" (Juliet, age 24).

Others spoke of escape/coping in terms of using their addiction to suppress anxieties and fears: "It suppressed fears so I was able to do more things" (Angie, age 27). Yet others sought to escape 'reality' or to cope with/escape from uncomfortable outside circumstances: "I enjoyed the feeling of removal from reality" (Leo, age 26); or, when asked about factors contributing to her addiction one respondent noted using "because the world sucks and it's hard to handle [laughing]" (Angie, age 27).

Overarching Theoretical Framework

The data collected in this study through semi-structured interviews was a product of both the shape of my presupposed conceptions regarding the detachment-compensatory

nature of occupations (further described in terms of Kielhofner's model of human occupation) and participants' reported phenomenological experiences of addiction.

As addicts answered questions about their experiences of addiction, their responses ultimately formed the seven categories listed and operationalized above. As each of these categories was discussed among the researchers, an underlying effort to strike some sort of cohesion or balance both within one's self and between one's self and one's environmental surroundings continually emerged. Just as Kielhofner describes *occupations* as dynamically involved in shaping both self and environment in an ongoing way, bi-directionally, addicts so too described their addiction(s)—as a means by which they created their identities and shaped their environments accordingly. There seemed to be a common notion that achieving a dynamic balance within self and between self and environment was the aim of engaging in an addiction (or occupation). It appeared that most respondents, in various ways, referred to an absence of such a balance, and spoke of their addiction as moving them toward the attainment of such a balance. This is reflective of the notion that humans are detached, and aim to strike a balance between themselves and their environments by compensating for their detachment. The idea previously discussed is that people compensate for their detachment through engaging in occupation. This study revealed that people also do it by engaging in addictions, suggesting that addictions may be occupations.

The data analysis of this study yielded the emergent overarching conceptual theme of 'discord between self and environment' and 'addiction being an effort to cope with and or bring balance to this discord'. This emergent overarching theme suggests the possibility that addictions are best understood as occupations because occupations, too, are centrally understood as efforts to bring balance between self and environment as well as bringing

balance merely within oneself. Further discussion of the above themes and the ways in which they give rise to the overarching framework will help to illustrate the notion that addiction, like Kielhofner's notion of occupation, is aimed toward creating a personal, environmental balance.

In what follows, I will discuss how, through the seven conceptual themes, I arrived at the above, emergent, overarching conceptual theme that addicts experience discord and engage in addiction(s) to deal with and/or eliminate this discord. I will examine the overarching theme in relation to the human experience of discord in general that arises from detachment. I will relate addictions to occupations—as attempts to compensate for detachment. While I assert, based on the findings of this study, that addictions are occupations, it might be noted that occupations should be categorized as differentially encompassing, and that these differences contribute to the reasons they are adopted. Addictions are perhaps best understood as occupations that are more encompassing than others, and that they are adopted on the basis of different degrees of compensatory need. These differences will be explored in more detail and discussed in the next section of this chapter, where I will suggest that occupations can be categorized in terms of the ways in which they compensate for varying human circumstances. While I have assigned value to occupations that foster focused flexibility, I will point out that choosing what I call 'addiction-occupations' has its own value when considered in relation to the compensatory needs of the individual.

The category of connectedness illustrates the fundamental problem: participants either experienced 1) a discomfort with themselves, 2) a discomfort with their environment, or 3) a discomfort with the way they experienced themselves within that environment. This sort of uncomfortable situation is descriptive of the overall "pain of detachment" (Moss, 2006) that necessarily arises in humans because they are biologically and existentially

uncoupled from programmed response patterns to specific environmental cues. However, it is (arguably) generally the case that humans find ways to compensate for this pain of detachment by engaging in occupations that provide instructions for how to ‘be’, how to act, how to respond, etc. to their environments. These occupational compensations include, for example, participation in religious, academic, or political institutions, and/or commitment to a family unit, vocation, or general hobby. The data provided by addicts in this study consistently describe some sort of mismatch, conflict, and/or maladaptation that has precluded the individual from experiencing a cohesive, well-adapted, occupational existence, suggesting that addiction may not sufficiently compensate for detachment.

However, it should be noted that the compensatory occupational engagements just mentioned do not necessarily yield a sense of cohesion either, and it is likely the case that most humans move in and between various occupational endeavors in an attempt to achieve an experience of cohesion with their personal environment(s) throughout their lives. Thus in noting the struggle with finding cohesion between self and environment through addiction, I also want to acknowledge the fluidity of the adaptive/detachment-compensatory nature of occupations in general that necessarily results from constantly changing environmental circumstances and evolving personal factors, a fluidity that is perhaps prohibited by the stringency of ‘addiction-occupations’.

The three negatively perceived circumstances that emerged within the category of ‘connection’ (a discomfort with self, discomfort with environment, and discomfort with the experience of self in environment) are mirrored in the ‘escape/coping’ category: desire to escape self, desire to escape one’s world/environment, and desire to escape reality. Also seemingly directly related are the three perceptions discussed in the ‘locus of control’ category: desired lack of control, undesired lack of control, and desired control. Desired

lack of control can be understood in correlation with desired escape from self from the escape/coping category. Recall, one addict described herself as very controlling, and she enjoyed engaging in her addiction in order to experience some freedom from herself by giving over her control. Undesired lack of control was expressed in terms of feeling externally controlled by one's addiction or life circumstances, and can be understood in correlation with the desire to escape one's environment or reality due to disdain about the circumstances one has perceived to have unjustly inherited. Finally, situations in which one feels in control through engagement in an addiction may be seen as escaping either self or environment. Recall the statement made by one such addict who liked to control his moods via his addiction, which amounts to a degree of escape from the reality of his emotions and perceived moods/experiences brought on by certain realities or environments. All of these illustrate an attempt to internally or externally localize direction for how to act, and can be seen, like occupations, as compensations for a detached situation in which one lacks instincts to direct her actions.

The category of 'penetration' might also be conceptualized in the above terms as either an effort to surrender one's self to an addiction, which could be viewed as a sort of escape from self, or to surrender one's self to addiction and all of its correspondent activities, thus creating an alternate environment that is saturated with roles and routines in line with engaging in that addiction. Further, an addiction with high penetrance could be seen as a 'go-to' point, a reference point upon which one can recognize herself and her surroundings in a way that is constant and familiar despite other less congruent, constant, and/or predictable aspects of her experience of self in in an environment.

The remaining three categories of 'habituation', 'identity' and 'motivation' have perhaps less to do with the negative side of this overarching theme of cohesion—that is, the lack of cohesion between self and environment—and more to do with the positive side of

cohesion, such as efforts to compensate for detachment in ways that bring together personal dispositions (including aspects of identity, volition, habits, interests, etc.) and various sensory, environmental stimuli with the goal of initiating action. As reflected in the data, addictions create habits, an identity, and an impetus for action (motivation), three crucial elements that allow one to exist as an occupational being, interacting in an environmental context, to compensate for detachment. Thus here I am suggesting that, because addiction appears to be an effort to deal with the human need to adapt in ways that allow for action in environments, it can and should be viewed as an occupation.

Theoretical Implications

Well-Being

Based on the above findings, it is clear that many aspects of the reported experiences of addiction overlap with MOHO's concept of occupation. But what about the criterion of well-being? Kielhofner (2008) tells us that occupations foster mental well-being in human cultures and societies, but eight of ten participants noted that their addiction brought negative consequences. The fact that addicts noted negative consequences of addiction perhaps indicates reasons against claiming that addictions fulfill this "well-being" criterion of occupations. However, it is not entirely clear how to interpret the findings without further inquiry. For instance, eight of ten participants also claim that they engage in their addictions to escape, avoid, or cope with life circumstances. This could suggest that their addiction aids their well-being by allowing them some distance from upsetting social or cultural circumstances. The notion that addiction makes bearable unbearable societal circumstances is not unprecedented and is mentioned, for instance, by Wasserman (2004). It could also be argued that well-being in society is too subjective and relative of a concept about which to make any definitive claims. Or, taking into account the complexity

of the issue, we may argue that we should extend the question beyond one of whether addiction is opposed to well-being (and therefore not an occupation) and instead inquire as to whether the structure of some societies and cultures are or (fail to be) conducive to human well-being. It could be the case that the impression of certain addictions as being opposed to well-being is really an illustration of a conflict with potentially problematic societal norms within a given culture or subculture.

Indeed, the overarching framework arrived via data analysis suggested that addict behavior and all of its facets illustrated human attempts to find a point of comfort/balance/ease in which they could cohesively exist both as themselves and as members of a (largely social) environment. Relating this theoretical framework to MOHO, we may speak of addicts' experiences in terms of adaptation—that is, attempts to alter behavior and circumstances to produce functional change. This would suggest that addicts, like other humans, are caught up in an attempt to realize well-being via occupational adaptation. It should be noted, here, that the proposed intention—that is, the intention to create a balance between self and environment through occupational engagement/adaptation (in this case, engagement in the occupation of addiction)—may be valid and true irrespective of whether or not the effort succeeds.

Alternatively, if we were to ultimately conclude that the general phenomenon of addiction is opposed to well-being, it would be important to articulate some fundamental characteristics of addiction in order to examine whether any other non-stigmatized occupations share those characteristics, such as certain consumerist ventures and/or ideals. If these 'addict-like' activities are considered occupations, so, too, should more stigmatized activities (addictions) be considered occupations. In short, the question of fostering well-being should not, without scrupulous examination, serve to distinguish some activities from others as occupational in nature.

Clinical Implications

This study has the potential to improve intervention strategies in cases of addiction in which change/recovery is desired, primarily because it characterizes addicts as rational human beings engaged in an effort to adaptively exist and find cohesion between themselves as individuals and their surrounding environments. This is in contrast to the disease model of addiction, which assumes addicts to be irrational and to be acting out an illness that is reflective of this irrationality, stemming from their disease, likely located in some aspect of their neurobiological make-up.

Some interview responses indicated a perceived low effectiveness of current intervention strategies. For instance, one participant reported:

I have been in lots of drug rehabs. I think I was in 4 before I was 18, and a lot of intensive outpatient units and maybe 4 more in my early 20's as well as individual therapy, but really I haven't been hospitalized in the past five years and that's when I actually became serious about getting sober so, I don't think any of those things actually worked (Jill, age 30).

Another stated:

In the treatment facility it was like self-counseling...there wasn't any need to look inside myself...it was just, you know...I was telling them the same thing that I had been telling people my whole life...we would discuss 'how did your emotions play into your drug use? How did your drug use escalate? Did you, you know, did you notice, you know, how did it start and did it change? Did you start off as a social user, out of peer pressure, out of curiosity? Did it continue like that?' They try to get you to look at your own patterns and your own history...not very well, I don't think (Juliet, age 24).

It seems that diagnosing addicts as diseased may cause them to lie about their addictions and instead adopt a narrative that they envision would be acceptable to professionals working within a treatment facility. Empowerment of addicts via removal of the assumption that addicts are irrational and diseased would likely increase the degree to which addicts share honestly about their circumstances, what motivates them, and how their addiction served them. Through an honest appraisal of their phenomenological experiences

of themselves as individuals and themselves in relation to their environments, occupational therapists may gain better insight into the struggles of individuals seeking help, and may be able to aid these individuals in finding similar occupational engagements that bring all of the benefits they experienced from engaging in their addiction while fostering, rather than inhibiting, focused flexibility. In other words, occupational therapists, by adopting an occupational model of addiction, may find themselves in the position to aid addicts in reconstructing their occupational existence in ways that increase cohesion and the experience of well-being.

Objectivity

It should be noted that all stages of data analysis took place in the order described in the methods section, and that throughout this process the researchers did not look for or make correlations between the data and the tenets of MOHO until the discussion stage. Throughout all stages prior to the discussion, researchers allowed constructs to emerge from the data alone. Analysis of the emergent themes as they related to MOHO did not take place until after all results were obtained. Yet despite this suspension of looking for relationships between collected data and MOHO tenets, an important point to be recognized is that, while researchers strived to be as unbiased as possible and consciously intended to not allow MOHO to influence data analysis, the wording of initial codes, selective codes, categories/themes, and theoretical samples may have been influenced by the background knowledge of the researchers. However, this is in line with Charmaz's (2003) constructivist approach to grounded theory in which the researcher brings background knowledge and insights to the study. It should also be noted that the way in which data emerged was likely influenced by MOHO due to the nature of interview questions, which were created with background knowledge of MOHO in mind and in an effort to determine whether or not addiction was an occupation on the basis of this knowledge.

Study Limitations

A major limitation of this study is that nine of the ten participants were (at least at one time) members of AA. This is a limitation because the views and ideas expressed regarding one's own addiction were likely influenced by the twelve step model. Rather than obtaining raw phenomenological experiences, it is possible that this study has obtained reports of AA's views regarding addiction through the voices of various participants.

A second limitation of this study is the possibility that participant responses to interview questions may not have been truthful due to the sensitivity of the subject matter; sharing personal thoughts and experiences regarding a highly stigmatized condition may have been perceived as risky by some participants. It is possible that some participants answered questions in ways that would minimize judgment from the interviewer and/or eventual readers of this study.

Finally, the demographics of this study are limited. Although participants varied in gender, race, sexual orientation, age, and place of birth, all were residing in Indiana, and many had been living in Indiana for at least a decade. Midwestern politics, culture, and treatment approaches may therefore have been limiting, and it is possible and/or probable that interviewing participants living in different regions of this country and other countries would yield different results.

Study Strengths

A strength of this study is that the interviewer was not affiliated with any treatment facility, minimizing the reasons participants may fabricate responses on the basis that their responses could affect them personally. Participants were informed that the interviewer was interested in the role of addiction in the participant's daily life, and that the interviewer

was exploring this role from a non-judgmental stance, merely to understand how addiction was experienced, and the role it played for the individual.

Another strength of this study is that participants, although primarily addicted to drugs and/or alcohol, also had and discussed addictions to numerous other substances and activities such as food and sex. This is a strength because it yields results that can be applied to understanding addiction as a whole, rather than being limited to the effects of a particular substance, as is the case with the majority of studies regarding addiction.

Future Research

Because there are so many factors in this study (type of addiction, duration of addiction, duration of abstinence, etc.), a factor analysis would be helpful in assessing whether emerging data differ when examined in relation to these different variables. For instance, some addictions may be more consuming than others, resulting in different compensatory dynamics. Other addictions may be more or less constraining, allowing for greater or lesser degrees of focused flexibility. Some may be more or less likely to foster a sense of well-being.

Future research is also needed to test the validity of the data collected in this study. As already noted, it is possible that the interview responses collected in this study provided a picture of what the 12-step programs view addiction to be rather than providing raw, phenomenological data that has not been influenced by a specific recovery model. It will therefore be useful to perform a similar study with a larger number of participants that includes a high percentage of addicts that have not been introduced to 12-step programs. Similarly, it might be useful to do a content analysis of 12-step literature for the purpose of illuminating possible themes that have emerged in the study that likely arose because of the 12-step influence on the study participants.

Conclusion

The data emerging from this study suggest that conceptualizing addiction as an occupation is warranted. The emergent overarching theoretical framework suggests that overall, addiction is an attempt to exist cohesively in a given set of circumstances, consisting of both one's personal demeanor (including temperament, performance capacities, etc.) and environmental situation. Many obvious examples illustrate cases in which addiction does not appear to foster well-being despite the possibility that its enactment may have incorporated the above-described intentions of trying to experience cohesion. This suggests the need to provide addicts with occupational options to achieve cohesion in a way that fosters well-being. The data collected in this study have convincingly shown that conceptualizing addiction as an occupation deserves further attention. Perhaps the following description of one addict's experiences with his addiction can best illustrate the overlap between these two concepts, addiction and occupation:

I enjoyed drinking. I enjoyed good wine, I enjoyed good scotch, I liked to drink beer...I just liked to drink. I liked what went along with the drinking. I liked the partying; I like the whole ship. I just really liked it all. I hear a lot of people say they really liked the effect [of drinking]. That's not been something I've ever dwelled on so much. I suppose I did. I chased after it. It wasn't just a physical thing, the addiction, it wasn't just that I craved it physically...I really wanted it, and I can't describe that really, but I've heard people say it changed how they felt and so forth, and I'm sure it did, but...maybe I'm odd in that regard...but I just really loved it (Bill, age 75).

While more research is needed, the present study offers reasons to believe that an occupational model of addiction is warranted. An occupational model of addiction is a conceptual model that is truly interdisciplinary, breaking down the culture/biology dualism that has thus far divided knowledge and research on addiction (Dunbar, Kushner, & Vrecko, 2010).

Addiction and Isolation

The study 'Is Addiction an Occupation' suggested that addiction is, in fact, experienced as an occupation and that it seems to correlate with a phenomenological experience of isolation. Therefore, the remainder of this chapter addresses this correlation by introducing Alexander's dislocation theory of addiction and expanding it with my concepts of focused flexibility, felt isolation, and addiction-occupations.

Social Exclusion

One of the reoccurring themes in the above study is the relationship between addiction and isolation, recovery and social or environmental 'connectedness'. This relationship between addiction and isolation has been assumed (by contemporary models of addiction) to be the consequence of exclusion from mainstream society. In this chapter I contest the idea that addicts are social outcasts, and that this is the source of their experiences of isolation. Instead, I examine isolation as overlapping with compromised focused flexibility. Thus where others have argued that 'addict behaviors' are not acceptable and/or conducive to participation in mainstream society (a notion stemming from the common tendency to correlate the 'addiction' with the deemed socially unacceptable activity of drug use (Comer, 2007; Koob & Le Moal, 1997; Roberts & Koob, 1997; Ross et al., 2008; SAMHSA, 2007)) and that addiction is therefore isolating, I will argue that social prejudice is not a sufficient causal explanation for addicts' experiences of isolation.

In the previous chapter I argued that many of the (negative) normative values attached to drug use in particular are often the product of racial or other unwarranted stigmas; but even if we ascribe to the social prejudice attached to drug use, it is important to note that social exclusion on this basis does not necessarily lead to isolation. For instance, drug-addicted individuals often form drug-using subcultures of which they are a part, thereby side-stepping sociocultural de-contextualization/isolation. But further, this project

(along with a number of other emerging studies on addiction (e.g. Griffiths, 1996; Potenza, 2006)) applies the term ‘addiction’ to a much wider spectrum of activities. With the expansion of the term addiction to many more conventional activities (such as work or surfing the internet), addiction does not necessarily de-contextualize individuals from their sociocultural worlds on the basis of social stigmatization. Activities that are not socially frowned upon such as ambitious, ‘addictive’ work patterns may be considered addictions, but do not necessarily socially ostracize the individuals who engage in them. People ‘addicted’ to work, sports, or other socially acceptable activities often enjoy the label of ‘successful’ or ‘ambitious’, and often, too, exist within a subculture of like-minded individuals who share the same kind of (addictive) participation in the activity in question.

Felt Isolation

As an alternative to the view that addicts are social outcasts and therefore experience isolation, I offer the notion that addicts experience a sort of isolation that exists whether one is accepted by mainstream society or not. Whether or not addicts are ostracized from particular societal realms, felt isolation, I argue, characterizes their intra-personal life experience. Felt isolation *may* result from being socially ostracized, but being excluded from a social group does not always produce this result of felt isolation, and felt isolation may occur even if one is not socially ostracized. In addition, felt isolation can occur whether an individual is in proximity with others or not. Data from the qualitative study discussed in the previous section indicated that one can be surrounded by others while still experiencing *felt* isolation. Felt isolation can exist even when one is amidst friends and family, and even when one participates in socially constructed roles and/or frameworks. This is the sort of isolation that, I suggest, characteristically defines addiction.

Felt isolation is the experience of feeling disconnected from other people. Perhaps it is easiest to describe felt isolation by discussing its opposite, the experience of interpersonal connectedness. Interpersonal connectedness, in general, is a central characteristic of being human. In bringing attention to the role of interpersonal connectedness in human life and development, my goal is to emphasize the ramifications that felt isolation can have for human beings by showing how contrary it is to their social natures. In other words, by acknowledging how *essentially social* human beings are (Donald, 2001; Tomasello, 1999) the significance that felt isolation can have for human experience is underscored; if ‘being social’ is the essence of being human, then experiencing felt isolation has the potential to inflict tremendous consequences.

I will emphasize this claim by revisiting detachment theory’s (Moss) implications regarding human sociality/permeability. Detachment theory claims that because of our underdevelopment and vulnerability, we are markedly open to, and in need of, social interconnection. But before revisiting detachment theory, in line with my aim to emphasize the essentially social nature of human beings (and concomitantly the potential consequences of felt isolation) I will examine Bruce K. Alexander’s discussion of psychosocial integration and its centrality in human development/experience (Alexander, 2008).

Then, in order to further discuss my concept of ‘felt isolation’ and its potential consequences (including its relationship to what I will call ‘addiction-occupations’), I will introduce Alexander’s (2008) ‘dislocation theory of addiction’. While ‘dislocation’ and ‘felt isolation’ may have subtle differences—dislocation seemingly refers predominantly to social/societal exclusion and/or individual effects of the breakdown of cultures and

societies¹⁵ while felt isolation is more focused on phenomenological experience and can occur even without social exclusion or societal breakdown—the proposed effects of dislocation (by Alexander) are one’s I intend to suggest as the effects of felt isolation. Thus in discussing Alexander’s dislocation theory of addiction I intend to bolster my argument that ‘addiction’ is essentially isolating—but not in the way that contemporary models have suggested. My claim that addiction is essentially isolating is an expansion of a perceived correlation between felt isolation and ‘addiction’ that can occur even if and/or when the individual and her occupations are accepted by mainstream society.

Psychosocial Integration

Bruce Alexander (2008) borrows the term ‘psychosocial integration’ from Erik Erikson to describe the connectedness that humans have the capacity to experience with one another. He refers to it as a “complex, ever-changing state of interdependence” (p. 58) among humans. Quoting Polyani, he appreciates the role of social interconnectedness in individual human development: “The discovery of the individual soul is the discovery of community” (Alexander, 2008, p. 58). The term psychosocial integration is used rather broadly by Alexander to refer to the human need for enculturation and an established sense of interpersonal, social identity in order to find one’s individual identity:

‘Psychosocial integration’ is a profound interdependence between individual and society that normally grows and develops throughout each person’s lifespan. Psychosocial integration reconciles people’s vital needs for social belonging with their equally vital needs for individual autonomy and achievement. Psychosocial integration is as much an inward experience of identity and meaning as a set of outward social relationships (p. 58).

¹⁵ While it may appear, here, that dislocation refers to the social exclusion based on mainstream values regarding drug use that contemporary models of addiction view as causing addicts to be isolated, Alexander’s ‘dislocation’, it will become clear, is much broader. Alexander uses the term dislocation to refer to something much more comparable to felt isolation. Dislocation may be described as the psychological consequences that occur when tight socio-cultural bonds and identities are shattered (or precluded) for various reasons.

Psychosocial integration is not merely about social interactions, but is rather about the essentially social construction of individuals.

Connecting with others in a deeply felt way—which shapes our development and psychological experiences and impacts the ways in which we will experience and interact with others and the world—is made possible *and necessary* by our natural detachment. Recall, the term detachment, here, is drawn from detachment theory (Moss), and is not meant to describe disengagement or disinterest, as is typically meant by the term (although these synonyms may apply at times). Detachment, here, refers to the biological nature of human beings. Detachment theory argues that humans are distinct in their genomic and organismic under-specialization. The resulting contingency of developmental processes is thought to open up a phenomenological possibility space (Moss, 2006; Moss & Pavesich, 2011) that allows for essentially human experiences. For example, because we are ‘detached’ from any specified way of being, we are constantly looking for ways to identify and relate to our worlds in order to create lives for ourselves, to create meaning and feel connected. Our vulnerability (which is the result of delayed maturation) (Gehlen, 1988) seems to give rise to the ability to feel the pain of others and be viscerally affected by it, to fall in love, or to create and participate in spiritual practices (see Moss & Pavesich, 2011). This sort of sociality, then, is *felt* connectedness with others made possible (and necessary) by a permeability that characterizes human beings. Sociality, then, is compensatory for detachment—our deep interpersonal connections can provide a sense of wholeness, a security net, a social backdrop upon which we can self-identify. Existing in deeply interconnected social networks, it has been argued (Alexander, 2008; Moss & Pavesich, 2011), prevents otherwise imminent catastrophes of under-development and under-specialization. Taking into account the compensatory nature of human social

interconnectedness, we can see that if/when this compensatory strategy is compromised, humans are faced with a great need to compensate for their detachment in other ways.

Dislocation Culture

Dislocation, Alexander describes, is experienced when circumstances prevent or interfere with the establishment of interpersonal connectedness¹⁶. Dislocation, says Alexander, can occur for a number of reasons. He offers examples such as an individual idiosyncrasy that a society cannot tolerate, violent childhood abuse, ostracizing an adult, flooding a local society with cheap manufactured products that destroy its economic basis, or voluntarily choosing to withdraw from social life into the single minded pursuit of wealth (Alexander, 2008). Dislocation, according to Alexander, can be transient or prolonged, but, he notes, while people can endure it for a period of time, if dislocation is prolonged, people become severely affected.

Dislocation occurs, according to Alexander, when tightly knit communities are broken. When this happens, a sense of connectedness may remain initially. But over time, individuals who once experienced the security of their ‘connected’ communities, now experience the effects of prolonged dislocation. He says:

People can endure dislocation for a time. However, severe, prolonged dislocation eventually leads to unbearable despair, shame, emotional anguish, boredom, and bewilderment. It regularly precipitates suicide and less direct forms of self-destruction. This is why forced dislocation, in the form of ostracism, excommunication, exile, and solitary confinement, has been a dreaded punishment from ancient times until the present. Solitary confinement is an essential part of the most sophisticated modern technologies of torture (p. 59).

¹⁶ It is worth noting, Alexander’s concept of ‘dislocation’ appears to stem from notions similar to the premise(s) of detachment theory—particularly the notion that “human beings are not psychologically self-sufficient” (Alexander, 2008, p. 58). He notes, “From early childhood until old age, individuals in every culture devote themselves to establishing and maintaining a place in their society” (p. 58). They are profoundly dependent upon interpersonal connectedness, i.e. the establishment of psychosocial integration.

Recalling the notion of human detachment and the proposed need for compensation, we can see how Alexander's views overlap with detachment theory's view of human nature and experience. Alexander explains that when tightly knit societies are broken apart, over time, the resulting dislocation leads people to become bored, lose their sense of purpose, and/or become depressed. This is evidenced, says Alexander, by what happened to some primitive societies when free-market-style trade and individual competition were introduced.

Alexander again quotes Polyani to describe the reported demoralization that arose from this "colonialisation of primitive people". Even if resulting in net economic gain for the primitive people, he says, it destroyed their cultures, "without which people were individually, as well as collectively, shattered...Primitive people are everywhere seen 'dying of boredom...or wasting their lives and substance in dissipation'" (Alexander quoting Polyani, 2008, p. 91). From a detachment theory perspective, when social networks were compromised, the detachment that was once compensated for through these networks re-emerged, posing a real threat to the psychological well-being of these individuals.

According to Alexander, while a number of various circumstances (mentioned above) may cause an individual in any type of society to become dislocated, the modern, globalizing, free-market society in which we currently live is *essentially* 'dislocating'. He says, "Whereas individual people can become dislocated by misfortunes in any society...only free-market society produces mass dislocation as part of its normal functioning even during periods of prosperity" (p. 60). He describes, "Free-market society subjects people to unrelenting pressures towards individualism, competition, and rapid change, dislocating them from social life" (p. 3). Thus for Alexander, where human identities and experiences were previously being formed in essentially social cultures that

fostered psychosocial integration, they are now increasingly being formed in an essentially dislocating culture that breeds individualism, independence—and felt isolation.

Dislocation and Addiction

Alexander claims that dislocation leads to continuously rising numbers of people adopting ‘addiction’ as a means of dealing with dislocation. He expresses this sentiment, for instance, in claiming “people adapt to dislocation by concocting the best substitutes that they can for a sustaining social, cultural, and spiritual wholeness, and addiction provides this substitute for more and more of us” (Alexander, 2008, p. 69).

For Alexander, the degree to which one is integrated into a social network has implications for that individual’s tendency to adopt one or more addiction(s). He suggests dislocation to be the primary cause of addiction, and goes on to suggest that restoration of psychosocial integration is a sufficient means for eliminating the propensity to engage in addictions (Alexander, 2008).

While this general idea provides a framework for beginning to conceptualize relationships between addiction and isolation (and recovery and social interconnection), these categories are insufficiently supple to account for human experiences of addiction, their compensatory values and their harms. Further, it is confusing to speak of ‘having’ or ‘not having’ psychosocial integration. What does it mean to say that psychosocial integration is restored? At what point can we say that psychosocial integration has been compromised to the extent that one is considered at a high risk of adopting an addiction? It is likely that in a given cultural context, people develop varying degrees of interpersonal connections. In the most intertwined of cultures, it is possible that some fail to develop within the culture in an integrated way (as noted in Alexander’s example of dislocation resulting from an individual idiosyncrasy) where others emerge with a deeply

interconnected sense of self. Thus, while the notion of psychosocial integration provides a conceptual measure, perhaps, for gauging interpersonal experiences, a broader conceptual scale, I argue, is needed to normatively contextualize addiction and other occupations.

Focused flexibility provides a means for understanding—across many levels—not only one’s degree of connectedness with others and the corresponding psychological rewards or ramifications (although these are included), but also one’s overall ability to exist in the face of natural detachment. Focused flexibility allows us to look at occupations in the context of the human, social world as more or less valuable on the basis of whether or not those occupations (in their social or not-so-social contexts) allow functional detachment-compensation. If one can find enough focus to compensate for the pains and dangers of detachment while maintaining enough flexibility to be robust in the face of challenges (lack of flexibility leads to rigidity and the propensity for breakdown, psychological or otherwise) and allow for the shared experiences and interpersonal connections made possible through detachment, I would deem her occupational repertoire as demonstrating focused flexibility. The concept of focused flexibility provides a means for normatively discussing addiction in relation to other occupations, and in relation to the experience of felt isolation. Further discussion will help to illuminate the point.

What I call ‘addiction-occupations’, by definition, do not foster focused flexibility. Occupations that foster focused flexibility allow room for choice, freedom, and change. Addiction-occupations, I suggest, are highly constraining and do not afford this choice. Addiction-occupations compensate for detachment in ways that are amenable to dislocation because they provide a great deal of specificity for how to act in the absence of social roles and social identities. They help to create a narrowly defined world that can be controlled and independently experienced by the individual. One addict interviewed and discussed by Alexander reports, “lived experience becomes organized along one central theme...life

becomes predictable...control becomes possible” (Alexander, p. 231). In Alexander’s terms, addictions are “narrow lifestyles that function as substitutes for psychosocial integration” (p. 62)¹⁷. Devotion to these narrow occupational repertoires is often, he says, an attempt to “adapt to the anguish of sustained dislocation...a narrowly focused lifestyle that functions as a meager substitute for people who desperately lack psychosocial integration” (p. 62). For Alexander, dislocated people are vulnerable to addiction; addictions compensate for the disillusionment and boredom¹⁸ that are caused by dislocation. One ‘addict’ describes his addiction to games, “solving Sudoku puzzles puts people in a ‘meditative state’ of ‘ecstatic experience’; Sudoku produces a powerful sense of self-satisfaction, which is what got [me] ‘hooked’; ‘Sudoku World’ is ‘a wonderful, peaceful place where everything always works out fine if you can just solve the puzzle!’ (in Alexander, 2008, p.41).

Because social interconnection often requires a degree of spontaneity, flexibility, and fluidity, it can also be argued that the limitations imposed by addiction-occupations *preclude* a degree of focused flexibility necessary to foster close, interpersonal experiences and relationships. In this way, addiction-occupations, because they do not yield focused flexibility, contribute to sustained felt isolation. In Alexander’s words, “By narrowing their lives, addicted people often exacerbate their own dislocation” (Alexander, 2008, p. 63). Thus the harms of addiction lie in its perpetuation of a larger problem—the anguish of dislocation and felt isolation.

¹⁷ Alexander defines addiction as “Overwhelming involvement with any pursuit whatsoever (including, but not limited to, drugs or alcohol) that is harmful to the addicted person, to society, or to both” (Alexander, 2008).

¹⁸ As one addict notes, “Heroin relieves boredom, and boredom is common in people who are vulnerable to addiction” (Alexander, 2008, p. 185).

In addition to being defined descriptively as narrow occupational repertoires, addiction-occupations are characterized in terms of their all-encompassing natures. Addiction-occupations are all-encompassing in the sense that they serve as perhaps the sole compensatory measure for detachment, thereby making it virtually impossible for the individual to disengage from the activity in question without risk of psychological breakdown. Recall, this project assumes that all humans must compensate for detachment. Occupations are a primary way of compensating for detachment because they provide roles, habits, routines, identity, and meaning, therefore presenting prescriptions for how to act in various life contexts and circumstances. Interpersonal relationships compensate for detachment by giving individuals an identity and a sense of connectedness that is bolstered by a social backdrop—a sort of compensatory safety net. People who have a number of close, interpersonal relationships remain connected and still have an identity and a place in the world, even if they are prevented from engaging in one or more of their primary occupational endeavors. This is not the case for dislocated individuals. For dislocated individuals, occupations serve as perhaps the sole compensation for detachment. As Alexander put it:

People for whom addiction is the most achievable substitute for psychosocial integration cling to their addictions with grim resolution, despite the harm that follows. Often they flatly deny the harm, despite the most obvious evidence. Often they appear insatiable. Without their addictions, they would have terrifyingly little reason to live (p. 62).

This is because dislocated individuals do not have a backdrop upon which they maintain an identity and place in the world. For dislocated individuals, their occupation(s) is/are the only compensatory means by which their detachment-compensatory needs are met, so when their occupations are taken away their identities are compromised and they have difficulty finding meaning in their existences.

The way in which addiction-occupations are used to compensate for detachment, I argue, is unsatisfactory. Addiction-occupations are harmful because they bring about felt isolation and a lack of focused flexibility that impedes an integrated life in the essentially social human environment. However, because, according to Alexander, the nature of human society is evolving to one where dislocation is central and definitive of our culture, addiction (addiction-occupations, I argue)—satisfactory or not—is an increasingly common means of compensating for detachment.

Conclusion

In this second section of chapter four I have discussed the emergent relationship between dislocation/felt isolation and addiction-occupations through the lens of focused flexibility. I have suggested that dislocation is perpetuated by addiction-occupations, which do not foster focused flexibility. Many occupations contribute to the felt experience of social interconnection, but it is worth noting that the degree to which one feels isolated or socially connected is not necessarily related to the frequency with which one engages with or is in proximity to others. Even apparently solitary occupations either imply interconnection or eventually lead to it. For example, the seemingly solitary occupation of authoring a book implies a reader, and eventually leads to relationships with readers, editors, etc. In this way, even solitary occupational engagements generally create an occupational profile embedded in a social network. Therefore, the satisfaction and success or value of an occupation has not to do with how often it puts one in contact with others, but rather, the degree to which it fosters focused flexibility because focused flexibility supports the potential for social interconnection if and when desired.

From this perspective, the harms of overly compensatory addiction-occupations lie in their reducing the potential for focused flexibility, thereby creating and/or reinforcing a

loss of social connection, perpetuating felt isolation. A lack of social connection may direct one toward addiction-occupations, but occupations are a means of establishing an identity and determining the degree to which one experiences social connection in the first place, thus addiction-occupations may come first, impeding social development. Based on Alexander's claim that free-market society and globalization are contributing to an increasingly 'dislocated' culture, we might expect more and more occupations to resemble addiction-occupations.

Conclusion

Review

In this project I have suggested an occupational model for addressing addiction. The project states views about both 1) how addiction might be best understood, and 2) how occupational therapy might best be implemented as an intervention strategy for addressing addiction. I argue, however, that the currently predominant frameworks and conceptual backdrop of occupational therapy practice do not provide the resource(s) I suggest would be revolutionary in (re-)conceptualizing and (re-)habilitating addiction. Thus in suggesting occupational therapy as a means for revolutionizing the way addiction is addressed, I argue in line with a number of others (see, for example, Kronenberg, Simo Algado, & Pollard, 2005) for a brand of occupational therapy that is more in conjunction with the philosophical insights of OT's founders.

As argued in chapter one, the field of occupational therapy has undergone transitions that have separated it from its philosophical foundations, leading it to become a more reductionist practice, in-line with the medical model. The latter, I argued, is insufficient for conceptualizing and addressing large-scale human problems such as addiction.

In chapter two I illustrated definitional ambiguities surrounding concepts of addiction, and introduced my occupational model of addiction. I highlighted shortcomings of neurobiological approaches to defining addiction. The roots of these shortcomings pay homage to my overall perspective regarding the irreducibility of human activity (which of course includes both addiction and occupations, and which therefore applies to occupational therapy). I provided an outline of the philosophical, anthropological, and biological background(s) from which an occupational model of addiction was

conceptualized, and laid out the premises of my argument that addiction is an occupational response to the human need inherent in detachment (Moss).

The latter chapters of this project moved toward questions that arise regarding application of an occupational model of addiction. For instance, to discuss treatment of addiction implies a normative stance that addiction is problematic in some way. In line with my call for a more holistic approach in occupational therapy and a non-reductionistic conceptual model of addiction, I suggested in chapter three that we only make normative assessments at the level of human occupation. Doing so discourages the tendency to define large scale, contextualized human experiences as the manifestations of the inter-workings of micro-level neurobiological phenomena. In an abbreviated literature review I illustrated the emphasis on drug-use in studies of addiction; an emphasis that, I argue, has shaped scientific inquiry regarding addiction and led to the drug-induced brain disease model of addiction. Opposed to this view (and the basis it provides for assigning normative value to addiction), I proposed ‘occupational status’ to be the definer of whether or not drug use takes on the characteristics of an addiction as generally understood. Because occupations are central and crucial in one’s self-construction, whether or not drug use (or another activity) is an occupation for an individual will determine, I argued, whether or not it appears as an addiction¹⁹.

The latter portion of chapter three addressed the task of differentiating addiction from other occupations. Particularly because activities outside of drug use have been included as potential addictions (both by myself and by many contemporary and historical models of addiction), at first glance I appeared to be saying that if an activity becomes an

¹⁹ This understanding of addiction (as drug use which is an occupation) can of course include all of the micro-level neurobiological phenomena cited to accompany addiction, such as plasticity reductions in neurocircuitry (Nixon & Crews, 2002; von Zastrow & Evans, 2006) and/or the “hijacking of the reward center” (Koob & Le Moal, 1997; Ross et al., 2008). The key point to take from this argument is that it is occupational status that determines what goes on at the neurological level, and not the other way around.

occupation it takes on the quality of an addiction. To address this apparent lack of discrepancy, the concept of focused flexibility was introduced in chapter three as a conceptual scale for distinguishing the effects of different occupations. I suggested that we take a normative stance regarding different occupational endeavors based on where those endeavors fall on the scale of focused flexibility.

Focused flexibility, I described, encompasses two valuable qualities that occupations, understood as detachment-compensations, bring to human beings in varying degrees. Focus is necessary for providing individuals with a stable identity, roles, habits, routines, temporal structure (Kielhofner), and an overall sense of how to live one's life. Flexibility is required to prevent personal breakdown in response to unexpected changing circumstances and/or environment pressures. It is valued as fostering robustness and personal growth, and as allowing individuals to deal with complexity, particularly the complexities inherent in interpersonal relationships. In a human environment which is essentially social, the flexibility to participate in the intricate nuances of human sociality is of crucial importance. As discussed in chapter three, the two (focus and flexibility) are interrelated; for instance, it is clear that a degree of focus is what allows for flexibility without total disorientation and psychological breakdown. Thus occupations that can substantiate both focus and flexibility in individuals' lives are deemed to have normative value. To answer the question of how to differentiate addictions from occupations in general, addictions were defined as those occupations which fall on the focus end of the focused flexibility continuum.

In chapter four I discussed the findings of a qualitative study I completed to address the question "Is Addiction an Occupation?" The study was undertaken to examine whether further theoretical and practical analysis of addiction as an occupation was warranted by

providing a preliminary examination of whether addicts experienced their addictions as occupations. The described experiences of ten addicts yielded an overarching theoretical framework suggesting addiction to be an occupational attempt to find a cohesive human existence. Seven central themes were identified, and a number of Kielhofner's tenets of human occupation emerged directly from the data. Findings warranted further examination of the potential usefulness and accuracy of a conceptual model naming addiction as an occupation.

Chapter four went on to discuss the relationship between focused flexibility and social connection in conjunction with findings from "Is Addiction an Occupation" that illuminated the isolating nature of addictions. Deemed fundamentally isolating, many of the characteristics generally attributed to addiction including compulsion, obsession, longing (craving), and others could, I argued, be attributed to the absence of social interconnection in addicts. That is, when individuals fail to participate in focused flexibility-yielding, detachment-compensatory occupations, they must, I argued, engage in something with surplus compensatory stature—in other words, they must gain compensation for detachment solely through one or few 'addiction-occupation(s)'. Individuals cannot put these 'addiction-occupations' on hold because without them, the individual has little structure, social connection, or purposeful engagement to provide the compensation for detachment that humans require. Whether engendering increasing degrees of felt isolation, or compensating for an already experienced feeling of isolation, addiction, I concluded, is an occupation that compensates for the human situation of detachment in highly stringent ways that perpetuate isolation—we might even, I suggest, label addiction as over-compensatory.

Expanding the relationship between isolation and addiction, I discussed Alexander's dislocation theory of addiction. For Alexander, the absence of social connection is referred

to as a lack of psychosocial integration resulting from what he calls ‘dislocation’. In line with my findings that addicts report a sense of deeply felt isolation, Alexander denotes dislocation as a major risk factor that creates susceptibility to addiction. For Alexander, while all dislocated individuals do not engage in addictions, all addicts are dislocated. Addressing dislocation by increasing means for psychosocial integration is, says Alexander, crucial (and sufficient) for overcoming addiction(s).

Broadening Our Focus: Global Cultural Climate and the Fluidity of Value

Interestingly, Alexander claims that, inherently, the modern, globalizing world is becoming increasingly dislocating and that, as a result, cases of addiction are increasing exponentially (B. K. Alexander, 2008). While addictions to hard drugs have notably increased (SAMHSA, 2007), these increases are not the ones I find to be most pertinent to the present project. What I find most illuminating are both the increases in everyday use of the term addiction, and the sorts of additions that are gaining new attention. Manifestations of new types of addiction(s) are taking place alongside the technological developments that have made globalization and the free-market economy (i.e. dislocation culture) possible. For example, addictions to technological devices and internet sites have become common, and internet addiction without contest makes up the majority of Google hits for the term ‘addiction’. Noted in Aljazeera,

Almost a year ago in Korea, an infant starved to death while her parents obsessively played an online game in which they cared for a virtual baby instead of their real-life daughter. Examples such as this indicate there are phenomenal social changes occurring due to increasing use of the internet—and in step with these new social and health problems, internet rehabilitation clinics are appearing all around the globe (Aljazeera, 2012).

Quoting Dr. Nahmeldeen al-Falahe, a consultant psychiatrist at the Priory Hospital in the UK, "I don't think anyone could have designed a more addictive device than the internet" (Aljazeera, 2012). And the executive director of the first internet addiction rehab clinic

located in Washington, Hilarie Cash, reports, “the quality of interaction among people is deteriorating due to the distraction provided by the internet...” (Aljazeera, 2012). Cash’s claim, supported by thought in psychology, is that short bursts of attention, which are becoming the status quo with increasing engagement with technological media, interfere with human interconnection.

Psychologists agree that without the ability to focus for long periods of time, healthy relationships are difficult to maintain. Attachment within relationships is essential to human well-being and people are increasingly seeking to satisfy that unconscious need through online connections - but it is face-to-face connections that people really need (Aljazeera, 2012).

Cash explains, "It's like trying to satisfy the need of hunger with just sugar: In the end you will starve" (Aljazeera, 2012).

The findings from “Is Addiction an Occupation?” matched with the theoretical stance put forth by Alexander’s dislocation theory suggest that changes in our culture have impacted and are impacted by human occupational endeavors. Thus as human culture shifts and becomes increasingly technologically-focused, human’s detachment-compensatory needs in relation to that culture may change.

I conclude from the present project that, when assessing the normative value of various occupations, the point of focus should be the goals of occupation in relation to detachment-compensatory need in the context of the relevant culture. A truly holistic occupational therapy, I conclude, is needed for this task.

Appendix A

Questionnaire for Primary Interview

- 1-Please state your name, age, location, and clean time (if applicable).
- 2-Please state when you were first implicated to be or diagnosed as an addict.
- 3-Do you agree with the implications or diagnosis?
- 4-What does it mean to be an addict?
- 5-Please state any treatment exposure you have had to address your addiction.
- 6-Please state what your primary addiction.
- 7-In your own words, please state why you think you became an addict.
- 8-Did/does your addiction serve any positive purpose in your life?
- 9-Do you enjoy engaging in your addiction?
- 10-Please describe what your day is like.
- 11-Please describe your weekly schedule.
- 12-What is the first thing you do when you wake up?
- 13-What is the last thing you do before bed?
- 14-What do you enjoy?
- 15-Have you always enjoyed these things?
- 16-What was your life like before you first engaged in your addiction of choice?
- 17-Did your addiction bring negative consequences?
- 18-Tell me what its like to experience the substance or activity to which you are addicted.
- 19-Tell me what life is like without that experience.
- 20-Does anything compare to that experience?
- 21-Do you know any other addicts?
- 22-What do you think of them?

23-What do they think of you?

24-What is the best part of your day?

25-What is the worst part of your day?

26-Tell me about your family.

27-Tell me about your friends.

28-What people or other factors have contributed to your addiction?

29-Are you employed?

30-What do you do that is important to you?

31-What do you do that is important to others?

32-Please state the five predominant roles that you play in your life.

33-Do you fulfill these roles?

34-Do you feel you fulfill these roles effectively?

35-Do these roles require anything from you? and if so, what?

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