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**INITIATING SELF-MANAGEMENT OF LIFESTYLE-RELATED CHRONIC DISEASE
RESULTING FROM UNHEALTHY WEIGHT: IDENTIFYING THOUGHTS AND
ACTIONS THROUGH PHENOMENOLOGY**

BY

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DISSERTATION

Submitted in Partial Fulfillment of the
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Doctor of Philosophy

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DEDICATION

I dedicate this work to God, through Jesus Christ. Without His guidance, my talent and character would not have been revealed. He is from whom I derive my strength, fortitude, knowledge and intuition, overcoming many obstacles for His glory. Romans 8:28 guides me in the continuance of my faith.

I dedicate this study to two mentors, Dr. Christopher Michael Joseph “Coffee:” Brown and Dr. Carole A. Conn. Dr. Brown offered uncanny insight and big-picture perspectives and unrelenting support towards this endeavor. His foresight into the future possibilities for me has been insightful and challenging.

Dr. Conn has been instrumental in promoting my spirit, strength and in sharing wisdom and knowledge. Her generosity of spirit has been limitless.

Finally with unreserved respect and humility, I dedicate this achievement to my daughter, Juliana Kaye Lee. Were it not for her personhood of consistent and unrelenting character, integrity, guidance and persistence, this study would not have been initiated, fought for and completed. With unconditional love to you, my daughter, Juliana, I offer this work as evidence of the impact you have made in my life. Juliana, you have been my unwavering light and guidepost.

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ABSTRACT

A heuristic phenomenological approach drew out participants' identified factors that initiated self-management of unhealthy weight-related chronic diseases; resulting in severity attenuation of current chronic disease(s) and lowered risk of comorbidity development. Prior to this study, there have been three omissions relating to older individuals who have unhealthy weight-related chronic diseases. First, direct first-person narratives of the process to self-management have not been reported. Second, the self-identification of the initiating factors leading to self-management has not been found in scholarly literature. Finally, cognitive reflection, an activity that results in paradigmatic shifts in adult behaviors has not been discussed from the first-person perspective (Cranton, 2006; Taylor, 2009; Taylor &

Cranton, 2012). Narratives of 10 participants resulted in understanding the challenges of managing chronic health conditions and factors associated with self-management, from these first-person perspectives. Two themes of factors that initiated the self-management process were developed, emanating from each participant's conscious acknowledgment and acceptance of responsibility. The themes identified were (a) acknowledgment of the significant, "last straw" diagnosis and (b) conscientiously accepting physical limitations resulting from respective chronic disease(s).

It has been important to acknowledge the need for such a study from societal and personal perspectives. First, because individuals are living longer, the risk of developing chronic diseases such as hypertension, type-2 diabetes, cardiovascular disease is further enhanced if the individual has unhealthy weight (Ginsberg & MacCallum, 2009; Morrell, Lofgren, Burke, & Reilly, 2012). Voluntary lifestyle choices of poor nutrition and lack of routine physical activity significantly contribute to the etiology of unhealthy weight, while healthy weight can significantly reduce this risk and sustain and increase quality of life as aging proceeds (Centers for Disease Control and Prevention, 2005). While the necessity to maintain a healthy weight through aging is well documented (Centers for Disease Control and Prevention, 2014; Clark & Brancati, 2000), statistics continue to reflect increasing numbers of older individuals succumbing to unhealthy weight and concomitant chronic disease (Kart, Metress, & Metress, 1992). This study obtains information directly from participants who have experienced a paradigmatic shift to self-management of weight and concomitant chronic diseases as evidenced by

participation in self-management programs and reductions of risks associated with weight and other comorbidities. Delimitations of a small homogeneous population segment do not preclude the value of the study. Limitations include employing heuristic phenomenology and a nonvalidated data collection instrument. However, this study provides a novel approach of data gathering from the first-person perspective. A future study should focus on the transformative learning process of transformative learning theory within the first phase of transtheoretical model of the stages of change theory to better understand the self-identified factors associated with how these factors initiated the self-management process. The efforts extended in this study should be of interest to individuals engaged in adult learning, healthcare and public health.

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Chapter 1

Introduction

Development of obesity, an unhealthy weight condition has multiple etiologies. In this study, obesity, resulting from poor lifestyle choices of nutrition and lack of routine physical activity (Adams et al., 2006; O'Rourke, 2009), is the focus. This type of obesity has resulted in increasing numbers of individuals who have developed related chronic diseases (Villareal, Apovian, Kushner, & Klein, 2005). With chronic disease development, life quality diminishes, a result of reduced life quality as individuals attend to chronic disease-related disabilities and symptoms (Devins, 2010; Fries, 1980). Although self-management has improved life quality through reduced weight that ameliorates the severity of existing conditions and mitigates the risk of comorbidity development (Adams et al., 2006; O'Rourke, 2009), not all individuals so afflicted take up self-management, as evidenced by growing numbers of individuals who are identified as obese (Finucane et al., 2011). With evidence of the positive effects of self-management, why have more individuals, as evidenced by growing numbers of obese individuals not initiated the process (Mokdad et al., 2003; Mokdad, Marks, Stroup, & Gerberding, 2000)? This quandary led to the development of the following research questions:

- What are the thoughts and actions that an individual with a chronic disease diagnosis has identified as contributory to initiating self-management?

- How, from the perspective of the individual, do these thoughts and actions contribute to initiating self-management?

Background

Obesity, a ratio of weight to height, expressed as kilograms/meters² (Hubert, Bloch, Oehlert, & Fries, 2002) has reached epidemic proportions. As of 2014, 34.9% of adults, aged 19 and older, have been classified as obese (Ogden, Carroll, Kit, & Flegal, 2014). Obesity is a significant risk factor for various chronic diseases (Hubert et al., 2002) that from chronic inflammation. These diseases include type-2 diabetes and atherosclerosis (O'Rourke, 2009); hypertension and hypercholesterolemia (Clark & Brancati, 2000) and insulin resistance, hypertriglyceridemia and coronary heart disease (Pi-Sunyer, 1993). Documented are two other causative factors of chronic disease development, heritability (Thornton-Wells, Moore, & Haines, 2004), and older age (Ashima, 2009).

A discussion of heritability and advancing age are beyond the scope of this study. However, given that we will all age and that older age is one of the significant, evidenced-based risk factors for chronic disease-development (Salihu, Bonnema, & Alio, 2009), we must consider its impact. Further, given that individuals living in the United States have an average life expectancy of 78.3 years (Centers for Disease Control and Prevention, 2014), reducing accompanying risk resulting from one significant source, unhealthy weight, can reduce overall morbidity, enhancing life quality.

Reduced life quality of individuals afflicted with obesity-related lifestyle adds further importance to this study. More than 25% of U. S. residents have multiple chronic diseases (Ward & Schiller, 2013). Living with multiple chronic diseases has resulted in early mortality of individuals of about 16% (Mokdad et al., 2000). Together, obesity-related chronic disease and increased life expectancy widen the gap between the development of the first chronic disease (morbidity) and death (mortality) (Crimmins & Beltrán-Sánchez, 2010; Hubert et al., 2002). The term for this gap is the “morbidity gap.” The morbidity gap currently spans 10-12 years (Crimmins & Beltrán-Sánchez, 2010; Hubert et al., 2002). In a retrospective longitudinal study (1986-1998) of 418 individuals, statistically significant results linked poor lifestyle choices to an increased morbidity gap (Hubert et al., 2002). However, lifestyle choices of good nutrition and routine physical activity can reduce risk of chronic-disease development by helping individuals maintain a healthy weight (Villareal et al., 2005). Further, upon the development of a chronic disease, many individuals can reduce the severity of existing diseases and mitigate the risk of comorbidities through self-management (Barclay-Goddard, King, Dubouloz, & Schwartz, 2012).

Therefore, attenuating chronic-disease severity and ameliorating comorbidity are positive motivational forces. Yet, many individuals do not initiate self-management, as evidenced by the growth in the number of individuals who become obese (Mokdad et al., 2003) and individuals who develop obesity-related chronic disease (Villareal et al., 2005). Why? One important reason is that self-management requires change. Change requires modification of one’s core beliefs,

practices and values (Mezirow, 1978). That is the importance of the study. It seeks to identify the contributory factors of participants' journeys and how these factors led to initiation of self-management.

Problem Statement

A significant etiology of many chronic diseases and their symptoms is obesity (Mokdad et al., 2003; Mokdad et al., 2000). Obesity has resulted from poor lifestyle choices of nutrition and lack of routine physical activity. Maintaining a healthy weight promotes life qualities such as physical independence (Villareal et al., 2005). While self-management has proven to attenuate the severity and to reduce risk of comorbidity, many individuals have not initiated the process. A possible reason has been that although theories have identified processes of change and the readiness of change and programs have been developed around these theories, there has been an omission: the self-identification of factors by individuals who have initiated self-management.

Statement of Purpose

The purpose of the study was two-fold. The first was to develop themes of self-identified thoughts and actions of individuals who initiated self-management of their chronic diseases. Related to this first purpose, the second was to elucidate how these thoughts and actions initiated self-management.

Three reasons for the cited purpose statements follow. First, the previous statistics have noted that increasingly greater numbers of adults are succumbing to

unhealthy weight-related chronic diseases stemming primarily from unhealthy choices of nutrition and a lack of routine physical activity (Mokdad et al., 2003; Mokdad et al., 2000). Second, the progression of unhealthy weight that initiates the development of related chronic diseases, culminating in early mortality, is well documented (Mokdad et al., 2000). As discussed, growing numbers of individuals succumb to weight-related chronic disease(s) regardless of evidence that maintaining a healthy weight can reduce its development (Villareal et al., 2005). Third, as will be presented in Chapter 2 – Literature Review, there was a dearth of information consisting of first-person narratives. These first-person narratives were critical in understanding the paradigmatic shift from a lack of self-management of health, as evidenced by unhealthy weight, to self-management as evidenced by weight-reduction, attenuation of symptom severity and amelioration of comorbidity development.

Chapter 2

Review of Literature

Introduction

Self-identified factors by individuals who have initiated self-management of chronic disease are not reflected in literature, yet some studies have alluded to psychosocial influences as being important to behavioral change. Two of these psychosocial factors are belief in self and the socio-constructivist environment in which learning takes place. Although self-efficacy (Bandura, 1993) is important (Abramson, Seligman, & Teasdale, 1978; Bandura, 1997; James, 1890; Rosenstock, Strecher, & Becker, 1988), studies have not established a link between self-efficacy and management of chronic disease. Other theories have addressed the social collaborative nature of change but have not explained how social collaboration initiated change (Bandura, 2000; Dillenbourg, 1999). Programs that teach self-management techniques also have not identified initiating factors to attendance and participation (Lorig et al., 1999). Peer-reviewed studies of behavioral change identified constructs of transformative learning theory (Mezirow, 1978) from their perspectives rather than from first-person narratives. The development of transformative learning theory arose from a trend surfacing in the late 1970s, subsequently addressed by Mezirow in 1978.

When asked to determine why adults made pivotal lifestyle changes, Mezirow (1978) developed the transformative learning theory. Retrospectively

developed, the theory suggested that when an individual acknowledged an event of great magnitude, cognitive processes were initiated that resulted in externalized change. Mezirow named the event of great magnitude a “disorienting dilemma (Mezirow, 1978).”

In peer-reviewed literature, transformative learning theory’s efficacy in explaining significant personal change has been documented. Changes included new careers, enhanced self-efficacy, cultural assimilation and nonweight-related chronic disease management (Aujoulat, Marcolongo, Bonadiman, & Deccache, 2008; Carpenter, Brockopp, & Andrykowski, 1999; Coady, 2013; Kessler, Dubouloz, Urbanowski, & Egan, 2009; Skeath et al., 2013). Given the theory’s breadth of application, I have extended the theory’s applicability to this study because a change to self-management of health is as significant as other changes involving paradigmatic shifts involving personal lifestyles. I have deemed that this shift is one of 180 degrees: from not managing health (a previous way of thinking and doing) to managing health (a new way of thinking and doing). The lack of management, as evidenced by unhealthy weight, has resulted in chronic disease(s) directly attributable to unhealthy weight. Following Mezirow’s logic, I have opined that the conscious recognition of one’s “un-health” is of such a personal significance that its recognition has manifested itself as a disorienting dilemma for the individual. Regardless of the individual’s prior belief (“I may weigh more than I should but I am still healthy.”) or the disparity between thought and reality (“Unhealthy weight won’t get me sick.”), it is the conscious acknowledgment of “I have a chronic disease” or “I can no longer . . .” that creates the disorienting dilemma. It takes conscious

acknowledgment of un-wellness. This acknowledgment has resulted in the individual questioning one's entire system of beliefs and frames of reference; thereby initiating the transforming learning process (Mezirow, 1978). It has taken the conscious acknowledgment of the disorienting dilemma to initiate change and the once-held frame of reference, "I am healthy" that is now quashed by acknowledgment and acceptance.

I further uncovered a second omission in literature. I was unable to find personal narratives of the change process to self-management of chronic disease. The researchers discussed study results. While I have recognized that these studies were not qualitative personal narratives or case studies, personal narratives represent a significant void in literature. To illustrate Mezirow's constructs in context, I have presented a narrative of a fictitious individual as he proceeds through his transformative learning journey. (Appendix A – Definition of Terms Used in Context includes definitions). The synopsis of literature reviews follows.

The Process of Transformative Learning – A Narrative

A transformative learning event starts with an individual's consciousness-raising event (physical or mental) that significantly upturns the individual's equanimity. Paralleling transformative learning literature, I present this scenario, from a first-person perspective: (a) I am facing a critical issue; (b) my current foundation (beliefs, experiences, ways of being and doing) are insufficient to resolve this issue; (c) I need to solve this issue; (d) maybe, I need new information; (e) I've researched, spoken to others and have gotten information; (f) from all this

information, I may have found a tenable solution; (g) I am planning to make changes; (h) I have made changes and (i) from my shifted perspectives of this significant issue, I am incorporating changes. This was the fictional narrative of Nikolai Jackson Yazunaki's experience.

Nikolai Jackson Yazunaki (hereafter referred to as NJY) is a midlevel territory manager for a software company whose clients are service providers engaged in medical billing and healthcare information. NJY is responsible for the business' multiple sites.

NJY is 54 years old, married and has two adolescent children. He is involved in managing his territory and his family with little time for much else. Traveling consumes 40% of his life and he often eats on the run. After rounds of meetings, he prefers to collapse in his hotel suite with a martini and fat-laden potato skins. NJY had not been feeling well the past 18 months, but he has dismissed these aches and pains as age-related and of no concern, although his once trim waist is now 40 inches in girth. At present, NJY is in a consultation with his primary care physician.

NJY hears the words, "You, my man, were lucky . . . this time. Your elevated blood glucose levels might have killed you! You have type-2 diabetes." NJY is floored. This statement from the man's primary care physician, is now the "disorienting dilemma," aka, a life crisis that cannot be ignored any longer (Mezirow, 1978).

Prior to this event, NJY was, he thought, in "good" health, an estimation derived from his "frame of reference" or the collective of stored knowledge or foundation of beliefs consisting of his experiences, expectations and thoughts

garnered through his life (Cranton, 2006). This frame of reference served NJY very well, prior to this diagnosis. However, unbeknownst to him, his frame of reference was the personal discriminating filter through which he gathered and kept or tossed out experiences and knowledge (Dubouloz et al., 2010). What he accepted and added to this collective contributed to his paradigm of good health – good health without much regard to the nagging and mild discomfort. After coming to grips with this diagnosis of type-2 diabetes, NJY reflected.

Critical reflection is a process of higher-order thinking (Mezirow, 1990) and is “. . . a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciation (p. 19)” (Boud, Keogh, & Walker, 1994). Reflection influences affect and cognition (Mezirow, 1997), resulting in more- encompassing perspectives and views because it changes one’s original beliefs, perceptions and feelings. After engaging in critical reflection, NJY came to the realization that the basis of his premise, “I am healthy,” is false. Now NJY must choose. He thinks he must query his personal involvement with this disorienting dilemma of a newly diagnosed chronic disease or ignore it.

He cogitates. “Is my health important to me? What does this all mean? Should I care? Is my prior belief that all’s OK still correct? Must I involve myself to regain health? Do I need to make a change?” These statements are identified as “premise reflection” (Cranton, 2006) or the question “Is the basis of my belief sound?” Critical reflection of one’s premises is requisite for transforming of one’s frame of reference (Cranton, 2006; Mezirow, 1991, 2000). Through premise

reflection, the individual has developed a new way of viewing himself/herself (Cranton, 2006). By engaging in reflective activities, the individual has opportunities to adjust problematic opinions with knowledge that guides resolution (Mezirow, 1990). Reflections raise important questions: the voracity, truth and perceptual aspects of one's reality versus what actually may be forthcoming. Activating critical reflection initiates transformative learning. This is because a transformative learning experience "... involves a fundamental questioning and reordering of how one thinks or acts (p. 139)" (Brookfield, 1995) by opening up options of new awareness and new perspectives (Husserl, 1931).

By initiating critical reflection, NJY has voluntarily sought to realign his existing paradigm of "I'm healthy and my aches and pains are just 'life'." NJY has sought information and tried on new roles that are more encompassing of his new reality and are reflective of the situation (Taylor, 1997). NJY is motivated. He is motivated to acquire new knowledge through the cognitive activities of assessing needs, acquiring knowledge and reformulating his paradigm of health. As noted by Mezirow (1978), Kessler et al. (2009) concluded that acquiring knowledge and choosing to act were integral to transformative change. During this discordant time, the individual reconstructs and reframes previously held beliefs and attitudes. The end result is a more encompassing and more accurate perspective (Cranton, 2006) of self, responsibilities, roles and actions.

After nine months, NJY and his primary care physician (PCP) meet. His PCP starts: "You are on your way, my man! A1c (measure of one's blood glucose control)

is down to 9.5. Your waist is 38 inches . . . and you're not sucking your gut!" NJY is on his way to reducing the severity of his type-2 diabetes-related symptoms.

NJY sought new information and changed his involvement in self-management of his weight. Results were apparent. NJY overcame his prior paradigm of: "I can do whatever." NJY now makes time for exercise (uses the treadmill at the hotel and parks his car on the perimeter of the hotel property) and refreshes himself with seltzer water and lime and requests salt-free pretzels to accompany his beverage. He has modified his perspective of what health means. He understands that "good" health requires his involvement – making good choices regarding nutrition and exercise.

While the narrative is fictitious, the process of transformative learning-constructs was identified and constructs of the theory (disorienting dilemma, frame of reference, critical reflection, meaning making, seeking information and integrating new knowledge with prior knowledge) were applied to the narrative.

The next section in this chapter identifies transformative learning constructs both within and outside healthcare to reinforce the breadth of the theory's applicability. In these studies, paradigmatic perspective shifts enabled individuals to become ". . . critically aware of [their] own tacit assumptions and expectations and those of others and assess their relevance for making an interpretation" (Mezirow, 2000, p. 4).

Studies Employing Transformative Learning – A Review

A void in the literature remains: I have been unable to find peer-reviewed literature in which transformative learning theory was used to explain thoughts and actions of individuals who have initiated self-management of unhealthy weight-related chronic disease. However, the theory has been used to explain the processes of change. A brief review is presented to illustrate how the theory has helped individuals make sense and move forward.

In another study, involuntary childlessness (inability to conceive and bear children) confronted the women who were a part of the study. The disorienting dilemma of involuntary childlessness activated critical reflection, a key cognitive process in the realigning of the individual to the new reality: one not defined exclusively by biological childlessness. Rather, women were able to view themselves more positively in light of their “childless” state (Mälkki, 2012).

In a 2000 study, meaning making-processes facilitated the transformation of individuals living with HIV/AIDS. Prior frames of reference (foundational beliefs and practices) guided these individuals to pursue lives of merit and not be identified as individuals with HIV/AIDS. The diagnosis of HIV/AIDS refocused their priorities. Many sought to be of service, to leave a legacy. Shortsightedness was replaced by wanting to be of service (Baumgartner, 2005). These new life purposes came about through diagnoses that activated critical reflective activities. In reflection of the premises and meanings of their lives, many developed new priorities. The transformative learning process resulted in these individuals reidentifying themselves as valued contributors to society now living with HIV/AIDS (Baumgartner, 2005). Living with HIV/AIDS created new paradigms for these

individuals – one can have a life-altering disease but need not be defined and diminished by their disease. Living with cancer is a similar paradigm, as this next study illustrates.

The next study focuses on cancer. Cancer can dash a person's frame of reference about living disease free. The newly diagnosed individual now questions pre-set goals. However, in this quest for redefining one's purpose in life or meaning making, post cancer, the diagnosis resulted in renewal and personal growth for these individuals (Lee, 2008). In another cancer study, participants stated that they had a more positive-outlook after the diagnosis. In reflection, they recognized that they had tapped into knowledge and resources of which they were not previously aware (Skeath et al., 2013). Participant statements were suggestive of the transformative learning process: new ways of dealing with life issues not related to cancer; employing different abilities, functions and sources to manage situations and the integration of the new ways of doing and being with the old ways of doing and being (Skeath et al., 2013).

New ways of doing and being were revealed in the next study on chronic pain from arthritis.

Opportunities for sharing similar pain experiences through group discussions enabled individuals to challenge prior knowledge and feelings about their lives with pain and disease. Through the transformative process, these individuals redefined how they dealt with pain through self-management and acknowledged that self-management offered hope in pain mitigation (Ashe, Taylor, & Dubouloz, 2005). Chronic pain and chronic debility were two conditions in which

these individuals developed meaning from experiences and integrated self-management into their lives.

In yet another study, voluntary choices and actions helped stroke victims learn to cope. Coping with physical limitations and feelings of personal vulnerability resulted in transformative learning through voluntarily seeking and using new knowledge. New knowledge guided the individuals to make sense of their strokes, resulting in redefining themselves with stroke without concomitant feelings of vulnerability and limitations. Transformative learning constructs of reflection, meaning making, seeking knowledge and integrating knowledge to enhance their lives were identified. The shift from being individuals with stroke to seeking recovery and building competencies in living with a stroke were noted. Researchers identified an iterative process in which learning led to recovery that generated more motivation to live competently with their chronic illnesses (Kessler et al., 2009).

In these studies, the process of transformative learning was identified through the theory's constructs. Prior to these disorienting dilemmas (chronic debilitating health conditions), each group of individuals identified themselves through their core foundational beliefs, thoughts and practices. Subsequent to these diagnoses, each had to make sense of the disease and how the diagnoses affected them. Initially, all appeared to be defined by and identified themselves as: "I am now a person with a disease." Through critical reflection, these individuals were able shift the paradigm of "I am a person with a disease" to "I am a person with a disease but I need not be defined by my disease." Many sought knowledge that helped them make sense of their lives with disease. Many elected to contribute to society as a

way of integrating themselves into opportunities that redefined their individual contributory worth. Contributory worth was one positive outcome of their disorienting dilemma of chronic disease.

Recognition of untapped abilities, skills and thoughts were other unrecognized skills. While these studies did not identify all constructs of transformative learning theory, they did provide evidence of the predictive nature of the theory in guiding individuals to live with their diseases. It is important to develop the breadth of the theory of transformative learning through a discussion of the theory's applicability in applications different from chronic health.

Other Applications Informed through Transformative Learning

A 2001 phenomenological approach identified the processes of 175 graduate-level teachers in training who were required to include technology adjunctive to their face-to-face teaching. Data triangulation included reflective essays, journal entries and follow-up interviews. Participants expressed similar transformative processes: Technology was incorporated into teaching practices that redefined their roles as facilitators, not just as information "conduits." The most significant outcome expressed by participants was greater self-efficacy (King, 2002).

A phenomenological study of efficacy online (75%) versus face-to-face (25%) learning was discovered through the reflections of 59 graduate students. These individuals experienced foundational changes of respective beliefs, habits and assumptions, the ability to deal with technology, and with online self-directed learning and collaborative online learning. Students added to existing knowledge by

embedding new “tips and tricks” into teaching practices. Embedded design elements were identified as strategies that promoted transformation. These strategies included opportunities for dialogue, interaction and self-reflection amongst students. Other strategies included the role of the instructor as a facilitator and face-to-face time before and after the online course was conducted (Boyer, Maher, & Kirkman, 2006).

In a newer study, 17 indigenous Formosan-Taiwanese college students identified tenets of transformative learning as empowering, overcoming identity conflicts through reforming their identities (Chen, 2012). These students articulated constructs of identity conflict, identity action and identity reformation. These were similar to Mezirow constructs of disorienting dilemma, seeking new knowledge and integrating the new self with the former self. The end results were changed perspectives (frames of reference) and enhanced self-affirmation (self-efficacy) (Chen, 2012).

In these three studies, paradigm shifts were noted: incorporating online learning into instruction (King, 2002), comfort with learning in an online environment (Boyer et al., 2006) and enhanced self-identity (Chen, 2012). Further, constructs of critical reflection, paradigm shifts in abilities and thoughts, meaning making of the new ability to understand and use technology and re-defining self with new knowledge were identified.

A review of existing literature corroborated Mezirow’s process of adult learning through transformation. Further, Mezirow’s constructs were identified in discussion sections of studies. Even applicability of transformative learning theory

outside the realm of healthcare was well documented. However, existing literature does reflect firsthand accounts from participants of “What” factors and “How” these factors influenced the paradigmatic shift to self-management.

Chapter 3

Methodology

Introduction and Overview

After review of the five qualitative approaches suggested by Creswell (2007), phenomenology was used to ground the study and provide the lens through which interpretation of results was made. I sought to uncover, analyze and synthesize through participant communication (written, electronic and face-to-face) each participant's experience of respective factors that initiated change. The phenomenological approach guided study participants through their own processes of discovery. Discovery enabled each participant to consciously articulate and identify factors that promoted the transformative process to self-management.

A survey was used to guide discovery. Question content was prefaced with "What" or "how," not "why." I have opined that prefacing questions with "What" or "How" tend to preclude reflection whereas "why" tends to invoke reflective processes through the individual questioning the premises of statements. Further, prefacing questions with "What" and "How" precludes close-ended "yes" and/or "no" responses. Participants articulated original thoughts and actions that initiated self-management. After articulation, participants were then asked to reflect on how these thoughts and actions initiated self-management. The deliberate process of nonreflective discourse followed by reflective communication enhanced participant discovery. Invoking reflection after personal communication enhanced

opportunities. It was the participant's words, gestures and phrases that were unabashed put forth, i.e., without judgment (that may have been personally censured). Each opportunity for the participant to communicate added to the breadth and depth of progress towards change. The collective of all communication became representative of each individual's transformative learning process.

The transformative learning theory was predictive of the paradigmatic shift from nonmanagement of health (as evidenced by unhealthy weight and development of related chronic disease) to self-management (as evidenced by reductions in weight and participating in self-management programs). The constructs and processes of transformative learning theory were conveyed in Chapter 2 – Review of Literature.

Husserl's Heuristic Phenomenology

Two phenomenological approaches were reviewed for this study: Husserlian heuristic phenomenology and Heideggerian hermeneutical phenomenology. In this chapter, Husserl's approach of heuristic phenomenology and constructs guided the methodological approach, including recruitment of and selection of participants, data gathering tactics and analysis and results compilation. The choice of Husserl's heuristic approach over Heidegger's hermeneutical is first presented, followed by additional information supporting Husserl's phenomenological approach.

Heidegger, a student of Husserl, initially aligned himself to Husserl's philosophical approach of heuristic (discovery of self) phenomenology. Later, Heidegger departed from Husserl's approach in favor of hermeneutical (experiential

interpretation) phenomenology. Heidegger was concerned with the individual understanding one's place in the world whereas Husserl stated that the goals of an individual were to understand the essence of a relationship with objects of the world, potentially to learn something about oneself.

In this study, the object is the disorienting dilemma. Other constructs include consciousness or intentionality, reflective periods identified as the epoché and the reduction proper and the noesis or noetic properties of the phenomenological experience compared with the noema or noematic properties of the phenomenon.

Foundational to binding these constructs is the transcendent nature of the object's properties (van Manen, 2014). The transcendent nature of an object is that properties of objects reveal themselves and then hide. Therefore, it takes multiple opportunities of the individual with the object to fully comprehend the object, and in this application the object is the disorienting dilemma.

As noted, heuristic phenomenology enhances opportunities for the participant to make discoveries about oneself relative to objects of the world. To optimize discovery, the individual must be conscious of the intention to spend time with the object (disorienting dilemma) yet remain apart from the world. Relative to this study, discovery is between the participant and the object of the world, the disorienting dilemma.

Whether properties of objects were revealed or hidden is predicated on how the individual relates to the object. In each encounter with the object, the individual must be in a state of intentionality. Intentionality is conscious and conscientious focus, without activating cognitive reflection (Husserl, 1931; Smith, Haree, & Van

Langerhove, 1995). Reflection precludes an individual from grasping the true essence of a relationship with the object because the focus on the object is influenced by the individual's thoughts about one's own thoughts. With each encounter (intentionality event) between participant and object, the object reveals properties through the individual's activation of consciousness that result in making sense or developing meaning making (Husserl, 1931; Smith et al., 1995). In a single encounter, identified properties are the object's noetic properties that taken together, is the object's "noesis." As noted previously, the revealing of these properties is fleeting because of the transcendent nature of these properties: the present becomes the past and the future is the present (Husserl, 1931; van Manen, 2014). The fleeting nature of time is the importance of intentionality and conscientious focus. Further, at a single encounter with the object, all properties are beyond the understanding of the individual. The revealing and then unrevealing of these properties spurs the participant to continue spending time with the object; to develop more complete understanding with the object (van Manen, 2014). Through repeated experiences, a fairly complete understanding of the relationship between oneself and the object of one's focus is realized.

The objective of the data collection instrument for this study, the survey, was to delve deeply into the participant's experience with the object of consciousness, the transformative process to self-management. Survey questions explored the constructs from different angles, guiding the participant to develop greater depths of understanding. With each encounter, the participant came to understand the truer essence or the "noema" of the experience. It should be noted that both Husserl

and van Manen conceded that true properties of the object were never fully discoverable regardless of the number of opportunities with the object, however, this does not obviate the importance of any individual getting to an understanding of one's disorienting dilemma. Further, in having developed the methodological approach, it was hoped that the collective comments of the 10 participants would convey a truth that would be more objective of identified factors that initiated self-management of chronic disease.

Another construct of heuristic phenomenology is one's suspension or the nonactivation of cognitive reflection. The two identified periods of suspended reflection are the epoché and the reduction proper. The epoché is the initial act of reflective suspension (van Manen, 2014). The reduction proper is identified as the continuation of the epoché (Husserl, 1931). The critical nature of suspended reflection, Husserl noted, ensures that an individual would have developed a greater understanding without reflecting on thoughts, beliefs, and experiences of prior encounters that might be deemed as criticism and thereby dismissed. Refraining from reflection, thereby dismissing pre-event thoughts, beliefs and experiences, the participant enhances meaning making. The participant takes in each "intentionality" event as a new experience, encounter or event.

Having discussed my rationale for employing transformative learning theory to address the first research question, "What," and embedding Husserl's transcendental phenomenological approach to address the second research question, "How," this chapter proceeds onto participant recruitment and selection. It is followed by information of constructs employed to reduce subjectivity and

enhance objectivity, transferability, dependability, and validity. These constructs are bracketing, positional power, process transparency and validity and reliability. The chapter concludes with a discussion of study delimitations and limitations.

Recruitment and Selection

After the University of New Mexico's Institutional Review Board's approval, I approached organizations that provided evidence-based nutrition and physical exercise programs. The rationale for approaching these organizations was that if clients were participating in the program offerings, their participation could be considered as evidence of self-management. These programs are offered to individuals who live or work in a large southwestern city. The recruitment process included cold calls, emailing information (Appendix B), and meeting with designated members of these companies. Upon approval from these companies, clients were recruited via flyer (Appendix C). The recruitment period lasted five months. An additional recruitment tactic employed was a network comprised of "friends of friends."

Rationale for Participant Number

Recommendation of participant numbers in phenomenological studies range from six – 25 (Creswell, 2007; Morse, 2000), predicated upon several study factors. These factors are data saturation, a representative participant pool, the first occurrence of a specific datum point and a representative sample of the population. I assessed, and therefore defined, that a representative sample of the population

included individuals who were able to address the research questions through conscious reflection of their involvement with the transformative process to self-management. The four factors to consider in the total participant number are now discussed.

The first factor is data saturation. If a repetitive pattern has occurred, then data saturation is evident (Glaser & Strauss, 1967). Saturation was met through repetitive statements of the initiating factors that created disorienting dilemmas.

Second, the participant representation of this study was sufficient for recommending transferability to a similar population because statistics from the federal Centers for Disease Control and Prevention (2014) show that relatively equal numbers of both genders develop unhealthy weight and subsequent weight-related chronic diseases. Therefore, the data collected from six men and four women were representative of the population of unhealthy-weight individuals who developed related chronic diseases (The rationale for other inclusion criteria is included in the next section: Rationale for Inclusion Criteria.).

Third, the more data elements there are, the richer the study. However, there is a “balancing” act to consider: Adding more participants versus drawing out as much information from each participant as possible. I chose the latter because I was focused on each participant understanding the personal journey to self-management. The purpose was not to enrich the study by simply identifying factors without benefitting participants.

Finally, the purpose of this study was to develop themes from data to address the research questions. Thus, the sample for this study was to obtain a

purposive sample able to address the research questions related to self-management of chronic disease (Smith et al., 1995). Additional commentary is reserved for Chapter 5 – Discussion.

Following these recommendations, I chose 10 participants who met most of the inclusion criteria of the study: Six from facilities and four from friends of friends. This participant pool, comprised of six men and four women was appropriate and recommended for two reasons: small participant numbers enhance depth of data (Higginbottom, 2004) and provide sufficient information in a qualitative phenomenological study (Creswell, 2007; Jansen, 2010; Morse, 1994).

Rationale for Inclusion Criteria

The rationale for participant inclusion criteria is addressed. All participants met inclusion criteria, except for “obesity.” The rationale for inclusion criteria is now addressed.

- Body mass index (BMI) of ≥ 30.0 kg/m² at initiation of self-management; objectively classified by the unhealthy weight termed “obesity.” Rationale: Evidence-based support exists for initiation of a cascade of deleterious chronic diseases resulting from obesity (Nejat, Polotsky, & Pal, 2010).
- A chronological age greater than or equal to 50. Rationale: Individuals 50+ are probably more likely to (a) have time to devote to making changes because children are older, (b) be motivated to reduce further risk and severity if they are working, (c) have financial resources to make lifestyle changes, and (d) be skilled

with technology sufficiently to participate in a computer-generated survey instrument.

- Diagnosed with one or more of the following obesity-related chronic diseases: atherosclerosis, stroke, hypertension or type-2 diabetes. Rationale: etiology of obesity increases risk (Nejat et al., 2010).
- Diagnosed within the past six months to five years. Rationale: The individual is likely to have initiated some form of self-management within six months to five years of diagnosis.
- Participating in some form of healthy nutrition and/or routine exercise. Rationale: indicative of involvement.

Data Management

Content of this section includes data handling, gathering, analysis and synthesis. Data handling is the first topic discussed and addresses data security and confidentiality.

Data Security and Confidentiality

Since its receipt, all participant information has been strictly maintained for my purview. Only I have received and reviewed participant documents. No one else has had access to these documents. I have not used the services of any other individual to help with this study. Data from participants were either delivered in person, by the U. S. Postal Service or was attached to an email. Documents are secured in a private location, accessible only by me. All emails containing attached

study data were deleted upon my retrieval and uploaded to my MacBook Pro. Participant documents containing relevant study data were recorded in my MacBook Pro. My MacBook Pro was safely secured in my residence. No jump drives were used to store data. Any printing of data was done at my home and destroyed via a double-cut electric shredder that I retained in my home office. Hard copies of UNM IRB required documents, upon receipt by me, have been in my personal possession. All real participant identifying information in this study was substituted through the use of three-letter acronyms. After approval of and completion of this study, all participant documents will be delivered to the Department of Organization, Learning and Information Sciences as mandated by the UNM IRB at its Albuquerque campus.

At the conclusion of this study, all participant documents will be stored in the Organization, Instruction & Learning Sciences (O, I & LS) department at UNM's Albuquerque campus in a locked file cabinet within a locked office. Outer department offices also will be locked.

Data Gathering, Analysis and Synthesis

All data was gathered directly from participants. Subsequently, to ensure confidentiality and maintain security, all data was analyzed from my MacBook Pro. No other individual was privy to the data derived from the participant qualifying form or the participant survey. Personal meetings with participants included only the participant and me, with the exception of one of the participants whose spouse

attended during the initial meeting. Both spouses agreed to meet in this manner. Subsequently, all communication was between only the participant and me.

In the data analysis, I took an interpretative phenomenological approach (Smith et al., 1995) (Information in detail appears in Appendix D). An interpretative phenomenological approach goes beyond simply reporting participant statements to guiding participants to understand the meaning behind the statements, enhancing one's knowledge of one's experiences (Smith et al., 1995).

Meaning behind the participants' experiences was also enhanced through prefacing the research questions with "What" and "How." I am suggesting that both words are more likely to draw out immediate, nonthinking responses, rather than prefacing questions with "Why." "Why" questions would be more likely to draw out responses after participant reflections and other cognitive activities. The goal of asking these questions was for participants to identify how objects, thoughts or activities initiated self-management and then, through further query, to initiate the reflective processes necessary to develop meaning making or sense making. Meaning making and sense making of events are what distinguishes transformative learning from simple adult learning (Cranton, 2006; Taylor & Cranton, 2012) through a process whereby an individual resolves a disorienting dilemma (Courtenay, Merriam, & Reeves, 1998).

Data gathering, analysis and synthesis were performed twice: first each participant's data, then data from all participants. The process of combining all participant data led to thematic development. Given a five-month recruitment period, participant data was received in a staggered manner. This provided

sufficient time for me to communicate with each participant shortly upon receipt that increased the participant's ability to recall responses and elaborate on ambiguous statements.

Another significant issue of the quality of qualitative studies is that these studies are perceived to have less contributory value to knowledge because the methodology employed, especially in the area of data analysis, is not as rigorous. My response is that it depends on the objective of the study. This study sought, without bias, to identify the factors that promoted self-management and how these factors promoted the change to self-management. This study was not designed to determine whether previously identified factors were the more likely factors that prompted self-management. The benefits of this approach are reduction of researcher subjectivity and participant cognitive activities including reflection that may have reduced "from the gut" responses.

Given the statement that qualitative studies are not as rigorous as quantitative studies provides an appropriate segue to addressing the common benchmarks of validity and reliability. Increasing validity and reliability is an efficacious and recommended undertaking to ensure greater contributory value to a study, achievable through increasing objectivity and decreasing subjectivity. However, increasing objectivity and decreasing subjectivity in a qualitative study decreases a significant benefit in conducting a qualitative study, that of rich, deep and meaningful data. This study now acknowledges how a balance of increasing objectivity and decreasing subjectivity was addressed.

Reducing Subjectivity and Enhancing Objectivity

Balancing subjectivity and objectivity is an important goal because achieving balance addresses the question of whether the study was worth conducting. Further, were the results and implications of the study of sufficient scholarly quality that the study might be used as a springboard for future research? Answering these questions lies in how subjectivity and objectivity were handled in the study's methodology. Excessive subjectivity can result in deep and meaningful thoughts, beliefs, actions, and processes that are highly emotional but lack transferability to a larger population. Heavy reliance on objectivity through appropriate methods and processes can produce weak and uninteresting data. The manner in which I have managed the balance between subjectivity and objectivity is addressed through identified factors related to these constructs. Balancing subjectivity and objectivity was developed through bracketing, recognition of positional power, process transparency and the constructs of validity and reliability.

Bracketing

Bracketing is a way to manage subjective bias (Smith et al., 1995). Bracketing requires reflective suspension (Husserl, 1931; van Manen, 2014). I consciously refrained from using preconceptions and reflections of past studies. Further, I abstained from reflecting on my experiences with transformative learning. Finally, in study methodology, I minimized overall subjectivity. First, I designed the survey to query similar constructs. I thereby did not permit a single statement to be representative of any specific thought, action or belief. I also provided participants with multiple opportunities to address similar constructs. Second, I analyzed the

data from each person separately, through which I gained a comprehensive, total picture of one's transformative experience; thereby not being influenced by any single participant's overall experience with that of another participant. Finally, I analyzed individual participant data, searching for ambiguities, conflicts and incomplete data and then I reconnected with participants to resolve ambiguities. These and similar tactics were suggested when conducting phenomenological research (Moustakis, 1994b; Savin-Baden & Major, 2013a; van Manen, 2014).

Positional Power

Positional power is defined as the perception that an individual holds greater "power" over another and that power inequities will most likely exist between two individuals (Takacs, 2003). Power inequities are sometimes manifested as a participant thinking, "I'm going to give them what they want." The deliberate tactic of offering each participant a choice of a day/date, time and location was employed to mitigate feelings of positional power. My tactic was to ease into the situation with innocuous questions at face-to-face meetings or to send the qualifying form and survey via email or US mail. There were no situations in which participant's emotional equanimity was compromised. I minimized positional power through various intake methods predicated upon various levels of contact ranging from face-to-face contact to email communication until a participant was comfortable enough to communicate in person.

Process Transparency

To further reduce subjectivity in methodology, I employed process transparency, defined as fully articulating all procedures relative to a scholarly study (Padgett, 2009). Process transparency was performed in this manner (Higginbottom, 2004): First, I fully disclosed how I recruited participants and how I conducted data gathering and analysis. Equal opportunities were provided to all individuals who were affiliated with health organizations via posting of the flyer in conspicuous public places. Additionally, I sought another recruitment method: friends of friends. I also spoke with friends who had expressed significant health changes to acquaintances of mine. These activities were evidenced through the IRB process and content contained within the IRB documents that were approved and submitted. The selection of individuals for participation was predicated only on meeting inclusion criteria. If the situation had arisen where equally qualified individuals sought participation at the same time, exceeding the potential number that I noted in UNM's IRB documents, I would have selected all individuals. This situation did not come to pass. Second, as noted previously, I analyzed each participant's data apart from the other participants. This separate analysis enabled me to fully understand each participant's transformative experience and not be influenced by the "ifs" and "whys" of other participants.

Finally, as noted, all participants were provided choices in the conveyance of their respective histories. Data from each participant was comprised of verbal conversation and data from the qualifying form and the participant survey. Regardless of the method, each participant's data was triangulated with a minimum of three data gathering processes consisting of face-to-face, email, phone, or US mail.

As noted at the beginning of this section, “Reducing Subjectivity & Enhancing Objectivity,” validity and reliability, hallmarks of qualitative research will now be presented.

Validity and Reliability

Constructs of validity and reliability in qualitative research are developed through the researcher working with persons and objects in a naturalistic setting (Golafshani, 2003). In this setting, the relationship between the participant and the object of their transformative experience results in deep, rich data without manipulating the setting in which the phenomenon is observed (Golafshani, 2003).

Acceptable validity and reliability in qualitative studies is enhanced through data triangulation (Golafshani, 2003) because data from multiple sources mitigate the shortcomings of individual data gathering methods (Patton, 2002). Additional tactics to mitigate doubt in qualitative studies include meeting construct validity (Cozby & Bates, 2012; Golafshani, 2003) and presentation of researcher epistemology (Appendix E). Researcher epistemology adds to process transparency (Creswell & Miller, 2000; Golafshani, 2003) which was previously discussed.

Construct validity is the benchmark in qualitative research: If construct validity is met, content and criterion validity are implied (Cozby & Bates, 2012; Golafshani, 2003). Construct validity was met by the iterative processes of revising participant intake documents post previous studies (2013 and 2014); literature reviews of peer-reviewed research that documented efficacy of phenomenology in studies focused on paradigmatic shifts in personal behavior; due diligence applied

to sequencing survey questions and the deliberate decision to query constructs with questions framed differently.

Reliability denotes consistency (Lincoln & Guba, 1985) of response. The methodological design enhanced the consistency of responses through survey questions that approached specific constructs from different angles and from the responses of the 10 participants. Further, reliability was met through an open-ended question format and communications with participants that encouraged them to broaden and deepen initial responses.

Data Collection

After interest was expressed to participate in this study, individuals were qualified via a short demographic profile instrument, the Participant Qualifying Form (Appendix F). Subsequently, 17 individuals were provided with the data intake instrument, the Participant Survey Questions (Appendix G). The format and content of these documents were developed from qualitative research methodologies ((Bloomberg & Volpe, 2012; Creswell, 2007; Fink, 2003; Savin-Baden & Major, 2013b). Further refinement of these documents came from a completed case study in 2013 and a two-person phenomenological study conducted in 2014. Document deliveries were made via US mail, provided in person or were email-attached. After the follow-up, seven individuals eliminated themselves with comments ranging from self-disqualification to lack of interest.

The primary data collection instrument, the Participant Survey Questions, consisted of Likert-scaled questions and short responses. Surveys of this nature are

recommended to draw out diverse opinions (Jansen, 2010) from purposive samples of the population (Smith et al., 1995) by enhancing opportunities for conveyance of depth and breadth of participants' meanings and experiences (Fink, 2003).

Researcher Qualifications

This study culminates an approximate 14-year commitment to understanding the role of an individual's psychological and physiological makeup in one's propensity to maintain health through one's life. The intention of my commitment is evidenced by a pursuit of health education and certifications that have brought together disciplines integral to the maintenance of human health. These disciplines include, psychology, nutrition, physical activity and culinary training and experience. One might view my education, commitment and experience as a triangle of three disciplines -- psychology, nutrition and physical activity, all critical to health maintenance. Further, my past careers in project management, social (health) marketing and service marketing provided real work skills that I have used in the current course of my education. Most recently, positions in teaching, nutritional counseling, program development, volunteerism and facilitating adult health education classes have reinforced and enhanced what I have learned in my doctoral studies program.

With regard to specific scholarly studies, I have conducted two other studies with a similar objective of identifying thoughts and actions in a transformational process leading to self-management: a case study (2013) and a phenomenological study consisting of two individuals (2014). In each study, I remained cognizant of

bracketing views and suspending reflection, taking in participant comments with impartiality.

With relevant experience and education, staying abreast of psychological and nutritional information and an unbroken seven-year period of developing this study, I have been sufficiently prepared to develop, conduct and finish this study.

Ethical Considerations

UNM's IRB approved an extension through May 13, 2016. The population of interest has not been deemed "protected." While I had prepared for the possibility for loss of participant composure or uncomfortable pregnant pauses, no such event occurred. No person-to-person sessions needed to be rescheduled.

Chapter 4

Results

Introduction

Chapter 1 discussed the rationale for conducting this study. Research questions were stated. Chapter 2 consisted of reviewing existing research. Research questions posed at the juncture of completing numerous literature reviews failed to answer the following research questions.

- What are the thoughts and actions that an individual with a chronic disease diagnosis has identified as contributory to initiating self-management?
- How, from the perspective of the individual, do these thoughts and actions contribute to initiating self-management?

Chapter 3 provided the rationale for employing a transcendental phenomenological approach predicated upon the discovery of influencing factors initiating health self-management. This chapter also included the rationale for employing interpretative phenomenology because of its alignment to Husserlian phenomenology. Data methods were discussed at length including the rationale for participant inclusion criteria and survey design. At the start of the study, participants met all inclusion criteria except for a BMI ≥ 30.0 kg/m². However, I chose to accept those individuals for participation. A statement was provided at the end of this chapter. Finally, Chapter 3 discussed methods including my qualifications

as a qualitative researcher, how I incorporated UNM's IRB requirements; data management (receipt, compilation, analysis); participant confidentiality and qualitative issues of transferability, study delimitations and limitations.

This chapter, Chapter 4, now addresses study results. The two documents used to collect participant data are the Participant Qualifying Form (Appendix D) and Participant Survey Questions (Appendix E).

The Participant Qualifying Form

This form serves several purposes. The first, as annotated in Table 1 – Participant Demographics provides evidence that participants meet inclusion criteria. With the exception of body mass index, all participants meet inclusion criteria for participation (age, type of chronic health condition and a time of six months to five years between health diagnosis to self-management. There was one exception: one participant initiated self-management after 6.6 years). Although some individuals had BMIs that were lower than 30.0 kg/m², I accepted them because all of the participants have presented with evidence-based chronic diseases resulting from unhealthy weight. Additionally, participant comments reflected that each was likely obese at the time of self-management initiation; however confirmability could not be established because only five of the 10 remembered their weight prior to being contacted for participation in this study.

The second purpose of the qualifying form was to provide evidence that the participants met inclusion criteria. As mentioned, all participants met inclusion

criteria for participation except for BMIs lower than 30.0 kg/m² and one participant who did not initiate self-management until 6.6 years post diagnosis.

A third purpose was to determine if links could be established between any of the following nominal and ordinal variables: demographics, anthropometrics, the intervening time between disease diagnosis and initiation of self-management, relationships between intervening time and disease type, and foundational beliefs (aging relationship to disease, disability and pain, role of self-responsibility and role of personal lifestyle choices.) Table 1 – Participant Characteristics provides details for all participants.

The final purpose was to provide evidence of self-management of health through documenting changes in BMIs (prior and current). Discussion of nominal and ordinal variables noted above is discussed later in Chapter 5 – Discussion.

Table 1. Participant Characteristics

Pseudonym	DET	LKL	DMD	PAL	WMP	PPH	DLW	DFD	MFS	CFP
Gender	Male	Male	Male	Male	Male	Male	Female	Female	Female	Female
Age Range	50-55	61-65	61-65	70+	70+	66-70	56-60	61-65	66-70	70+
Income (\$1K)	50-75K	50-75K	> 75K	N/R	25-35K	50-75K	< 10K	> 75K	10-25K	<10K
Diagnosis to Management (months)	1	3	12	12	67	44	33	1	3	3
Disease	DM-II ¹ , asthma, gout	HTN ²	N/R	High C ³ & TAG ⁴ , DM-II ¹ , HTN ²	CVD ⁸ , High C ³	DM-II ¹ , arthritis & TAG ⁴	HTN,	DM-II ¹	COPD ⁵	A ⁶ , HTN ² , MI ⁷ ,
Current BMI	28.0	29.5	28.8	22.5	28.0	28.8	28.4	29.8	26.2	22.5
Prior BMI	38.0	N/K	N/K	25.7	32.3	N/K	N/K	N/K	31.5	25.7

Note. Key for abbreviations include: ¹DM-II is type-2 diabetes, ²HTN is hypertension, ³C is cholesterol, ⁴TAG is triglycerides, ⁵COPD is chronic obstructive pulmonary disease, ⁶A is atherosclerosis, ⁷MI is myocardial infarction or heart attack and ⁸CVD is cardiovascular disease.

A portion of Table 1 is consolidated into Table 2 – Summary. Inclusion criteria were the demographic characteristics of gender, age range and income and

months from chronic disease diagnosis to self-management initiation. First, one purpose was to provide a summary of the numbers of individuals who were slotted into each of the demographic categories and secondly, to provide easy-to-review information of months from diagnosis to disease, disease type(s) and BMI that will be discussed in Chapter 5. Some highlights include an almost 50/50 split of genders (six men and 4 women), a fairly even distribution of participants ranging from 50-70+ years of age, a fairly even distribution of income from less than \$10,000 to more than \$75,000 annually and a dichotomous split of participants who began self-management shortly upon diagnosis and participants who waited to begin the process.

Table 2. Summary

Characteristic	Number of Individuals
Gender	
Male	6
Female	4
Age range	
50-55	1
56-60	2
61-65	3
66-70	2
70+	2
Income (\$1,000)	
<10K	2
10-25K	1
26-35K	2
35-50K	0
50-75K	3
>75K	2
Diagnosis to management	
1-3 months	5
4-11 months	0
1-5 years	4
> 5 years	1

Participant Survey Questions

The Participant Survey Questions document consisted of three Likert-scaled and four open-ended short response sections. The Likert-scaled questions and short response questions had specific aims. The Likert-scaled questions served to assess two constructs, related to changes in thoughts and actions. These two constructs, self-efficacy and foundational beliefs are subsequently discussed in this chapter (These two constructs were also discussed in Chapter 2 in the literature review and personal narrative sections.).

Likert-scaled Sections

Questions in the three Likert-scaled sections consisted of two categories: self-efficacy and foundational beliefs. Subcategories of questions were developed from these two categories. Self-efficacy was divided into questions pertaining to high self-efficacy and low self-efficacy. Foundational beliefs were divided into three categories. The first were beliefs about the relationship between aging and disease and between disability and pain. The second set of questions focused on opinions of one's personal role in chronic disease development. The final set queried each participant's foundational beliefs of lifestyle choices in the development of their chronic condition. The importance of levels of self-efficacy and foundational beliefs is because these constructs act as filters through which individuals process information and experiences (Cranton, 2006; Taylor, 2009).

Likert-scaled questions were restricted to four responses: (Strongly Disagree – 1, Disagree – 2, Agree – 3 and Strongly Agree – 4). Prior to data analysis, “3” and “4”

responses were changed to “4” and “5.” The purpose of initially using consecutive numerical values (1, 2, 3 and 4) was to avoid participant confusion: “What happened to ‘3’?” Prior to the data analysis, I replaced the responses of “3” and “4” with “4” and “5”. The predominant purpose of eliminating the “No Opinion – 3” or a neutral response precluded the possibility of a “social desirability” bias (DeMaio, 1985), i.e., responses emanating from, “I want to please the researcher” (Garland, 1991).

Self-efficacy

Self-efficacy is the belief in one’s ability to complete tasks (Bandura, 1993). Self-efficacy is identified as instrumental in developing empowerment. Empowerment is identified as assuming personal responsibility with activities such as self-management of chronic disease (Aujoulat et al., 2008). The questions of the survey categorized into high self-efficacy or low self-efficacy were established based upon my extensive research of the construct. Of secondary importance was my education in behavioral psychology and my experience employing psychological counseling techniques in training conducted in business and educational environments.

Foundational Beliefs

Foundational beliefs are entities held by individuals (Husserl, 1931) from which emanate thoughts and actions and as previously noted affect receptivity to change as influenced by the degrees to which these beliefs filter new knowledge put in front of the individual (Cranton, 2006; Mezirow, 1990; Moustakis, 1994a; Taylor, 1997; van Manen, 2014). Beliefs regarding the relationship of aging to development

of pain, disability and disease potentially preclude action to attenuate (Chang, Chang, & Shen, 1984; Kirby, Dennis, Bazeley, & Harris, 2013; Levy & Langer, 1994).

Foundational beliefs about one's role may create motivation to change or dampen thoughts of change (Aujoulat et al., 2008).

Likert-scaled Categorical Description

There were 45 questions, 18 focused on self-efficacy. The other 27 questions focused on foundational beliefs. Question content representative of each of these five areas is noted below with specific questions appearing in Appendix G.

Category Type	Question Content
High Self-efficacy	Levels of self-belief, self-initiative, can do attitudes, etc.
Low Self-efficacy	Affected by opinions of others, appearances by others.
Belief: Aging and Health	Perceptions of disease and pain associated with aging.
Belief: Self-responsibility	Failure to perceive own role in current health condition.
Belief: Lifestyle Choice	Choices of healthful nutrition and routine physical activity.

In relating these numbers to study participants, affirmation of acknowledged self-responsibility and greater self-efficacy were not surprising results because at the time of this study all participants were engaged in self-managing. While one might argue the circuitous nature of this previous statement, literature has reflected that self-efficacy (Bandura, 1997), acknowledging personal responsibility (Aujoulat

et al., 2008) and acting on critical reflection (Brookfield, 1995) are important elements in transformative learning. In this study, all three elements were identified by participants in their short responses to questions embedded in the various sections of the survey.

Survey – Short Response Sections

Short response sections of the survey were embedded into four sections. Question content dove more deeply into foundational beliefs and relationship to current health status. Other questions sought to have participants identify thoughts and whether these thoughts contributed to external behaviors and actions, identified as self-management.

To refresh, I present the research questions:

- What are the thoughts and actions that an individual with a chronic disease diagnosis has identified as contributory to initiating self-management?
- How, from the perspective of the individual, do these thoughts and actions contribute to initiating self-management?

The operative words, I have suggested for this qualitative study are “What” and “How.” These prefacing words, in my experience, initiate responses of nouns (objects) and verbs (actions). Nouns (thoughts, actions or objects) and verbs (how these thoughts and actions initiated the process of self-management) are identified through participant statements.

The transformative process was initiated by an event of such significance that the participant was unable to “get a grip” on it through the processing of this

event through the current and usual set of collective beliefs, thoughts and values. In this application of transformative learning, the event was the diagnosis of a chronic disease; prior to which each participant believed they were in relatively good health. Three themes comprised of periods -- pre, at pivotal moment and post -- were derived from participant surveys and personal communication. Subcategories were identified where data appeared indicative of sub-themes.

Theme 1: The All's Right with the World

Persistent evidence of the development of specific chronic diseases was linked to unhealthy weight; however, study participants had not initially acknowledged this nor had they chosen to attenuate the progression of increased weight. There are two categories of narrative.

Precursor Attitude – Disregard

In this category, participants expressed an apparent disregard for their progressing negative health.

“I ate when I felt like it . . .” (PPH)

“I pretty much ate what I felt like eating.” (PAL)

“. . . but was led by my emotions to do whatever felt good at the time!” (DMD)

Poor Nutritional Habits and/or Lack of Physical Activity

Here are the comments from participants who in retrospect, expressed precursors of unhealthy weight resulting from a lack of physical activity and poor nutritional habits. DMD, LKL, DFD and MFS acknowledged that both poor choices of food and a lack of exercise were contributory to unhealthy weight and increased risk of chronic disease. Participant comments indicated that a lack of routine physical activity and poor nutrition were equally disregarded, resulting in progressively unhealthy weights.

“[I wish I would have taken] more time . . . [for] exercise. Eating smaller portion[s] . . . healthier food . . . avoid[ed] eating fast food like [f]ried [c]hicken, French fries, fatty food, less rice and [less] starchy food.” (LKL)

PPH stated, “. . . eating 4-5 times a day.”

Stated DFD: “I did very little . . . poor eating . . . limited exercise . . . watch [TV] . . . lay around.”

“Too much ice cream!” (CFP)

“Fault was with inactivity, failure to pursue regular regime of aerobic and resistance exercises.” (WMP)

“My unhealthy weight is caused by poor eating habits and lack of daily exercise. I could have avoided ‘junk food.’ ” (MFS)

Although there appeared to be an apparent disconnect between a disregard for progressive deleterious health and acknowledgment of poor lifestyle choices, it might be explained that acknowledgment was activated through this survey; perhaps likened to “meaning making.” Theme 2, which follows, expresses the conundrum of these participants.

Theme 2: Coming to Grips with the Disorienting Dilemma

Firstly, participants, initially, not alarmed with increasing poor health, as evidenced by Theme 1: “The All’s Right with the World” period are beginning to face reality. However, negative situations presented themselves such that each participant could no longer ignore: evidence of poor health and/or reduced physical abilities.

Conditions of Health: Clinical Diagnoses

While a few participants received diagnoses of chronic health conditions prior to the diagnosis that initiated self-management, their statements reflected the “straw that broke the camel’s back,” the final diagnosis.

“Lab tests.” (PML)

“[The] doctor’s diagnosis.” (PPH)

“My heart attacks.” (CFP)

“[. . . one of the ICU doctors...] ‘Change or Die.’ ” (DET). DET’s diagnosis came about suddenly, “Definitely being admitted (to the emergency room) was my wake-up call, I thought I had all the time in the world . . . [I was] too young to have DKA (diabetic ketoacidosis).”

Conditions of Health: Self-acknowledgment of Physical Limitations

In this second section, the “straw that broke the camel’s back” was self-acknowledgment of physical limitations and its relation to their respective chronic diseases.

“I tried to complete a simple task . . . left me huffing, out of breath and strength.”
(DMD)

PAL stated, “. . . fatigue.”

MFS noted: “My weight [was] causing problems with my ability to inhale oxygen to a fuller extent.”

Self-reflections

Overall, the statements by DFD and DMD were reflective of and acknowledgment of recognized self-responsibilities. “I did very little to help myself remain healthy. . . I have contributed to this [current chronic disease]. I[’m] ashamed of my self-afflicted behavior. I could have avoided “Definitely, this was self-inflicted!

DMD said: “I successfully repressed the reality of my weight from active thoughts. . . . [I] excused myself... My work encouraged a sedentary lifestyle. I was totally irresponsible in my health choices because I never felt bad I had no gauges to stop my out-of-control behaviors.”

“... pack trip in Wyoming ... outfitters were discussing which horse to put me on because of my weight. [That] was the clincher.” (DFW)

“Seeing coworkers, friends and family getting sick and pass[ing] away.” (LKL)

Psychological and physiological limitations were articulated consistently.

Thoughts and Actions

Emanating from self-reflections, these participants articulated thoughts and actions that continued to provoke changes to self-management of their chronic diseases.

“I guess I was looking down the road and not liking what I saw . . .” PAL said.

“My doctor wanted me to start with insulin. [Needles . . . I can’t]” (DFD)

. . . a patient in the emergency room. . . This gentleman was in his mid-seventies . . . in fantastic physical condition as far as his physique was concerned . . . [I] decided to make lifestyle changes . . .” (DET)

PPH stated: “Your life is over if you don’t change. . . fact that I could no longer walk 2 miles without resting to ‘catch my breath.’ ” (PPH)

Stated DFD: “Not prepared for such a diagnosis! . . . Now [I’m] a part of my genetic pool . . . joining the ranks of family members . . . My relationship with food has changed. I no longer feel addicted to food. I no longer want that full feeling . . . don’t particularly like or crave [certain foods, but] knowing that are there are good fuel-food for my body.” (DFD)

“When they said I had sleep [apnea] it hit me “Wow[,] I need to change things.” (DFW)

Theme 3: Life Anew – Stronger Self and Greater Self-involvement

Paradigmatic shifts from “here” to “there” emanated from all participants. Two categories were developed from these shifts, changes to descriptions of self and of

changes in activities. Overall, DFW said it the most succinctly. “I believe I have changed my thoughts about my health.”

Paradigmatic Shifts – Self-identification

Categorically, all participants developed positivity about self. Regardless of current circumstances, all participants distinctly identified their respective personhoods in a positive manner, apart from their diseases.

From “concern, self-conscious . . .” to “Lucky, fortunate, gifted, refreshed, encouraged. . .” (WMP).

Humble . . . Stronger . . . improving.” (DFD)

From “Bouts of depression . . . not feeling useful ... embarrassed ashamed . . .” to “See[ing] the progress gives me the ‘I can . . .’ attitude” (WMP)

“By doing the above [no more whining, strategic planning, better solutions, new exercise protocol] I moved away from a depressionable situation to a happier state . . .” (PPH)

Paradigmatic Shifts – Activities

Continuing with the previous subcategory of paradigmatic shifts in self-identification, this section conveys the positivity as extended onto their activities.

“I am the keeper of my health. My doctor is not responsible for my health . . .” (DFD)

From “[I] never thought about eating healthy” and “[I] was an occasional exerciser”

to “The working on healthy eating is one goal I know I can do.” (MFS)

From “My heart attacks” to “[Now I] read labels. [I] use relaxation techniques.”

(CFP)

MFS said, from “. . . dis[gusted] with myself . . .” to working on healthy eating is one goal I know I can do.”

From “My poor eating habits, as well as limited exercise . . .” to “I am preparing more food at home and reading more nutritional labels.” (DFD)

From “Careless physical activities . . . lack of self-control in skiing, playing ball!” to “I am currently eating healthier meals and avoiding ‘junk’ and sweets. [I am] walking more.” (WMP)

PPH’s prior activities were “...eating the wrong combo of foods . . . stopped exercising.” And “. . . eating 3 squares [meals] a day.” He has since adopted new choices, “creating better eating solutions.”

“My thinking of eating healthy and doing more exercise make[s] me feel more refresh[ed] and better.” And “Since I did my regular checkup and doing my yearly

biometric screening, I'm more aware of my condition of aging." (LKL) LKL concluded with, "My thoughts about managing my health [are] very important to live comfortably without pain and [to live] longer. [I'm] looking forward to better aging."

Theme 4: The Present

In this last series of questions, participants were asked to identify personal thoughts of journeys to self-management. Several clusters of thoughts were expressed: No blame, good health habits are a priority, letting go of "doing it all," and positivity – the attitude that "I can. It's not too late!" A few powerful were statements:

CFP wrote: "... Use relaxation techniques. Learn something new. Do something fun. Breathe!"

Stated DET, "... expect plateaus, but don't give up ... it will be worth it. Listen to your body. There will be days when you need a break, that's okay."

WMP wrote, "Appreciate opportunities, longevity, healthy choices ..."

Relating Participant Characteristics to Self-efficacy and Foundational Beliefs

Regardless of the small number of participants, bringing together the constructs of self-efficacy and foundational beliefs with sociological, demographic

and anthropometric markers as reflected in the next table, Table 3 – Averages of Self-efficacy and Foundational Beliefs (expressed as mean value of 0.00) is important to this study. The explanation of the averages for all five Likert-scaled categories is provided. For each of the five categories, each participant's response was averaged. Higher ranges of 3.51 to 5.00 indicate some level of agreement, whereas lower ranges of 1.00 to 3.50 indicate some level of disagreement. Given the small number of participants, only descriptive comments about this information are appropriate.

The rationale for Table 3 was to provide a succinct table of each participant's demographic characteristics (age, gender and income), relating these characteristics to beliefs of self and foundational beliefs. Self-beliefs were reflected as levels of self-efficacy (dichotomous values of high and low). Foundational beliefs included, first, the relationships of advancing age to chronic pain, disease and disability. Second and third, each participant's foundational beliefs in one's role in unhealthy weight progression and personal beliefs of the relationship between lifestyle choices and development of unhealthy weight and concomitant comorbidity development are related.

Table 3. Self-efficacy and Personal Beliefs

Pseudonym	DET	LKL	DMD	PAL	WMP	PPH	DLW	DFD	MFS	CFP
Gender	Male	Male	Male	Male	Male	Male	Female	Female	Female	Female
Age range	50-55	61-65	61-65	70+	70+	66-70	56-60	61-65	66-70	70+
Income (\$1,000)	50-75	50-75	>75	N/R	25-35	50-75	<10	>75	10-25	<10
Diagnosis to management (months)	1	3	12	12	67	44	33	1	3	3
High self-efficacy	4.33	4.33	3.67	3.78	3.78	3.33	4.44	4.11	4.22	3.67
Low self-efficacy	3.33	3.11	2.78	3.22	2.67	3.22	3.44	4.00	2.33	3.33
Aging, disease, pain & disability beliefs	2.20	2.70	2.30	2.90	1.60	2.60	2.60	2.20	2.30	1.90
Self-responsibility beliefs	3.36	3.43	3.64	2.64	2.71	3.07	3.00	3.21	3.43	2.71
Lifestyle choice beliefs	3.00	4.75	2.50	3.50	2.50	3.00	3.00	3.00	4.50	3.50

Relating Research Questions to Identified Themes

The research questions prefaced by “What” and “How” were answered by participants like this: “What” were the clinical diagnoses and physical limitations and “How” clinical diagnoses and physical limitations initiated self-management was the final acceptance personal responsibility. As discussed, four themes were developed from this study and aligned to the suggested process of transformative change as articulated by Mezirow (1978).

Table 4 – Linking Research Questions to Themes provides a summary of articulated words that were aligned to each of the themes. This table has provided, in summary form, how themes were developed from the “what (nouns)” and “how (verbs)” of verbatim participant words.

Table 4. Research Questions and Themes

Theme	What	How
1: The “all’s right with the world”	Food, exercise, positive emotions	Disregarding, ignoring, not feeling Watching, not-participating
2: Coming to grips with the disorienting dilemma	Diagnoses, heart attacks, death Change, DKA, no strength, fatigue, Future, needles, shorter life, depression, shame	Not being able to inhale, huffing Dying, reflecting, being scared
3: Life anew - stronger self & greater self-involvement	Lucky, fortunate, gifted Self-responsibility, relaxation, fun OK, opportunities	Refreshing, encouraging
4: The present	Mental attitude, never too late	Delegating, breathing

Chapter 5

Discussion

Introduction

This chapter includes the following discussions. The first topic is the study's findings. This is followed by suggestions as to how healthcare practitioners can guide individuals similar to these study participants in the earlier initiation of healthcare self-management activities. The fourth topic is conveying the importance of timely consideration of this study on making an impact on the current alarming health trends that make up "unhealthy." A discussion of study delimitations and limitations is addressed next.

Findings

The first topic is focused on the research questions. The second topic focuses on the influences of demographics (gender, age, and income), the levels of self-efficacy (low and high), and foundational beliefs (relationship of aging to pain, disease, and disability) as these influence the period to initiating the self-management of unhealthy weight-related chronic disease.

The research questions are provided below.

- What are the thoughts and actions that an individual with a chronic disease diagnosis has identified as contributory to initiating self-management?
- How, from the perspective of the individual, do these thoughts and actions contribute to initiating self-management?

Were the research questions answered? Yes. In answering the first research question of “What,” the factors were the clinical diagnoses and the self-perception of physical limitations. “How” these factors promoted self-management were through each individual’s final acceptance of a chronic disease diagnosis and/or the final acknowledgment of restricted activities and physical limitations. Although the study provided answers to the questions, much remains unanswered. One big question is whether or not these factors can initiate the process of self-management sooner.

Relating Initiation to Demographics, Self-efficacy and Foundational Beliefs

To partially provide this answer, it is important to consider the influence of an individual’s level of self-efficacy and/or foundational beliefs on time to initiation. Table 5, Summary of Inter-relationships, provides a comparison between the period of time intervening between the diagnosis of chronic disease to initiation of self-management and (a) demographic (gender, age, and income), (b) self-efficacy levels (low or high), (c) foundational belief of the relationship of aging to pain, disease, and disability, (d) foundational belief of the relationship of self-responsibility, and (e) foundational belief of the relationship of lifestyle choice. The rationale for each of these comparisons is provided in the column entitled, “Rationale for Relationship.”

Table 5: Summary of Inter-relationships

Time between Diagnosis and Self-Management with	Rationale for Relationship
Demographics (gender, age, and income)	Potentially, age, gender and/or income may influence the intervening time between diagnosis and initiating self-management
Self-efficacy (low and high)	Self-perception of level of one's efficacy may affect initiating change
Foundational beliefs (relationship of aging to pain, disease, and disability)	The belief that pain, disability, and disease accompany the aging process may preclude active involvement in maintaining a healthy weight
Foundational beliefs (self-responsibility)	A higher level of self-responsibility may encourage an individual to initiate change to self-management more quickly.
Foundational beliefs (lifestyle choice)	Acknowledging that lifestyle choices result in current disease state(s) may decrease the time period between diagnosis and self-management

Although identified that demographic variables influence thoughts and actions (Campbell et al., 2014), the small number of participants made identifying the influence of the variables untenable. Referring back to Table 3, Self-efficacy and Personal Beliefs, gender had no relationship to period of initiation to self-management, the range (in months) for males was from 1 month to forty-four months and between females was 1 month to thirty-three months. Income range for men was from no response to >\$75,000. For females, the income range was from <\$10,000 to > \$75,000. The range for age of males was from 50-55 years of age to 70+ years of age.

There was no relationship between the period of initiation to self-management and the level of self-efficacy because of over-lapping ranges between low self-efficacy and high self-efficacy. Low self-efficacy ranged from 2.33 to 4.00 while high self-efficacy ranged from 3.33 to 4.33.

Finally relating period of initiation to self-management to foundational beliefs, there were no relationships. Although somewhat subjective in categorizing

periods of initiation as “fast,” “moderate,” or “slow,” the classifications are needed to determine relationships between the period of initiation with demographics, self-efficacy and foundational beliefs as self-efficacy and foundational beliefs are noted in literature as contributory to change (Bandura, 1997; Husserl, 1931) (In this study, change is the initiation of self-management of health activities). The period of initiation to self-management was divided into three ranges: fast (1 to 12 months), moderate (13 to 36 months) and slow (37 to 67 months). For fast initiation, the range to initiate relating to beliefs of aging was from 1.90 to 2.70, for beliefs of self-responsibility, the range was 2.71 to 3.43, and for beliefs of lifestyle choices, the range was 2.50 to 4.75. For moderate initiation, the range to initiate relating to beliefs of aging was from 2.30 to 2.90, for beliefs of self-responsibility, the range was 2.64 to 3.64, and for beliefs of lifestyle choices, the range was 2.50 to 3.50. For slow initiation, the range to initiate relating to beliefs of aging was from 1.60 to 2.60, for beliefs of self-responsibility, the range was 2.71 to 3.07, and for beliefs of lifestyle choices, the range was 2.50 to 3.00. Essentially, the ranges of foundational beliefs (aging, self-responsibility, and lifestyle choices) overlapped with the 3 periods of initiating (fast, moderate, and slow), making determining relationships between initiation and foundational beliefs untenable. Regardless of this limited information, there are a few points of interest. With regard to foundational beliefs, participants generally disagreed that disease, disability and pain are coincident with the aging process. This was not surprising, because if these participants felt that aging was coincident with disability, disease or pain, they likely would not have taken up self-management activities. Also, acknowledging personal responsibility for the current

ill health prompted the participants to act responsibly to attenuate further severity, without blaming anything or anyone else for their current chronic disease(s). Finally, participants generally agreed poor choices of improper nutrition and lack of routine physical activity promoted chronic disease development.

Regardless of limited ability to draw conclusions these participant data, pursuing factors that affect self-management initiation are important. The next discussion reinforces this statement.

Making an Impact on the Trends of “Unhealth”

There are three statistics. The first statistic is the average age at which Americans die: 78.3 years (Centers for Disease Control and Prevention, 2015). Americans are living longer. However, individuals are not living as healthily as evidenced by a gap of 10-12 years between development of a disease and death (Crimmins & Beltrán-Sánchez, 2010; Hubert et al., 2002).

The second statistic is the number of individuals within specific age ranges. There are more older individuals than younger individuals: the total population of the United States is skewing older. From 2000 to 2010, individuals aged 18-44 represented only 6.0% of the total United States population while those aged 65+ represented 15.1% of the total population (Howden & Meyer, 2011). Further, individuals 65+ are expected to increase from 40.2 million (2010) to 88.5 million in 2050 (National Health Statistics Group, 2010). These statistics convey that the financial and human resources of younger cohorts groups are unable to provide the necessary financial and human resources to care for older cohorts (Morgan & Kunkel, 2011).

The third statistic is financial. Total healthcare costs from 2009 to 2018 are expected to grow from \$2.5 trillion to \$4.4 trillion (National Health Statistics Group, 2010) while obesity-related healthcare costs are expected to increase from \$99.2 billion (1995) (Finkelstein, Trogon, Cohen, & Dietz, 2009) to an estimated \$147 billion in 2008 (Wolf & Colditz, 1998). Individually, these figures represent a per-capita lifetime expense for health-related costs of \$316,600 (Alemayehu & Warner, 2004). After age 50+, there is an exponential increase in healthcare-related expenses (Meerding, Bonneux, Polder, Koopmanschap, & van der Maas, 1998).

To summarize, having an individual self-manage weight within a healthy range will ensure that said individual will live with fewer chronic disease encumbrances and that societally, we will be able to provide care without potentially bankrupting our healthcare system.

Finally, participants generally agreed that poor choices of improper nutrition and lack of routine physical activity promoted chronic disease development.

Study Delimitations

Important in phenomenological research is data heterogeneity and homogeneity. Heterogeneous responses increase the breadth of data that more closely approaches the object's noema (between the individual and object of consciousness) (van Manen, 2014) while homogeneous responses are representative of the purposive sampling of the population (Smith et al., 1995) that enhances validity. The study's delimitations and limitations are discussed.

Delimitations included geographical locale, the population segment from which individuals who met inclusion criteria were selected, and the actual participants. The study was offered to individuals who resided or worked in a large, metropolitan, southwestern city. This smaller geographical limitation may have eliminated qualified participants outside of the city.

Next, a significant delimitation was the pool of individuals from which potential participants were drawn. The individuals selected as participants met specific identified criteria but also possessed participant variables not identified as a part of this study. Thus, first, it was not prudent to generalize results to other individuals who fell outside the study's criteria. Second, unidentified variables could have influenced the thoughts, feelings of actions in some manner unbeknownst to me. Some of this potentially influencing variables may have been a) variables common to those who participated and those who chose not to participate, (b) individuals who were diagnosed and/or participated in some form self-management outside of the time parameters, (c) individuals who had participated in self-management and reduced risk and comorbidity development but whose disease states were not considered, (d) the friends-of-friends network may not have been broad enough to get a more diverse potential participant pool, and (e) selection of participants was limited to individuals less than or equal to 50 years of age. This is important because individuals of any cohort (Morgan & Kunkel, 2011) have had societal experiences that are influential to activities and thoughts not identified in this study.

Study Limitations

Limitations included the theory used, the methodology that guided study procedures, and the data instrument used. The transformative learning theory (constructs and processes) was used to ground this study. Transformative learning was chosen because of a common construct identified in this theory and the qualitative method of phenomenology. This common construct is reflection. Reflection, activated at appropriate times, prompted the self-identification of the “What” factors and “How” these factors initiated self-management. I had reviewed a similar change theory, the transtheoretical model of the stages of change (TTM) (Prochaska & DiClemente, 1982). I chose not to use it because of its comprehensive identification of biopsychosocial influences that would have blurred the study’s focus. I sought information as revealed through personal reflection, not the collective of information from many individuals. Also, biological and sociological influences were beyond the scope of this study. Biological influences included genetic heritability and/or propensity for specific disease. Sociological cohort influences on the participant were outside of the scope of the study: transformative learning focuses on the relationship between individual and object of consciousness. Finally, TTM focused on identifying the various stages of an individual’s readiness to change. This study was somewhat retrospective in that participants had already changed, and the focus was to identify the factors that initiated change and how these factors promoted change. Finally, the main focus of TTM is to engage more individuals to change, predicated upon the individual’s readiness to change, whereas this study’s focus was on identifying factors that initiated change.

Another limitation was the use of phenomenology as the qualitative approach. Of the five recommended qualitative approaches (Creswell, 2013), I also considered grounded theory. I had reviewed grounded theory but chose not to employ it because of its methodological approach and lens through which data is reviewed. Grounded theory starts with data that is analyzed to develop a new theory. I did not start with data because the participant and I needed to “clear our minds” of any preconceptions. The goal was to understand the purity of the relationship between the participant and the object of their disorienting dilemma.

Further, grounded theory encourages understanding the data through social interaction (Elliott & Lazenbatt, 2005). This study focused on the experiences of the participant and their relationship of the object of their disorienting dilemma, not on the articulated experiences derived from social interactions.

Finally, a validated instrument was not found; however, I created an instrument that was construct-validated through revision of a similar survey from two prior studies (2013 and 2014). The new version expanded on constructs (affect and the nonlinear and reiterative nature of the process) embedded in later versions of transformative learning theory espoused by Mezirow.

Study Importance

Why should this study even be considered? There has been a modicum of naiveté in initiating, conducting and completing this study. I strongly suggest, however, that perhaps naiveté permitted me to conduct a study in which more scholarly, knowledgeable colleagues might have considered this as a fruitless or

nonproductive venture. I present these reasons regarding the importance of this study.

- The identification of a “pre” phase. Virtually no information is available about what prompts individuals, from their perspectives, to initiate self-management. Studies have presented information of the value of self-management while in a program (during the maintenance phase) but have failed to identify what “gets an individual into the door.” Further, efficacy of the maintenance phases has also been well documented.
- Using a phenomenological approach and lens to delve into transformative learning from the first-person perspective. There are two benefits from this approach. First, from this perspective, the actual thoughts, actions and feelings are not subjected to erroneous interpretation. Second, ambiguities conveyed can be eliminated through further queries.
- Cognitive reflection. The common construct between the transformative learning theory and phenomenology is individualized reflection: withheld and then activated to guide the participant through the process of transformation. Reflection aided the participant in developing a better understanding of one’s personal role in future health. Another important point of cognitive reflection was it was integral to understanding the need for personal and achievable involvement, casting aside prior excuses, and developing action to attenuate further risk and severity.

- A blank slate or *tabula rasa*. Peer-reviewed research is generally of a quantifiable nature without understanding the depth of emotion and turmoil involved in making a significant change (that which enters into foundational beliefs). This study has driven deeply into sensitive and untapped emotions of participants. As researchers, I suggest that we must lower the individual's defenses so as to gently draw out information. I believe in leaving a legacy from which builds upon the knowledge of the past.

Who Needs to Know

The cost of healthcare is likely to exceed the human and financial resources of generations who will foot the bill. The younger generations, purely in numbers of individuals, will be unable to support the burgeoning budget and human resources mandated to care for "us older individuals." Therefore, regardless of one's discipline, the care of any individual to preserve one's dignity is the responsibility of all individuals, regardless of discipline. Particularly, those professionals engaged in a holistic approach should pay heed. This study integrates psychology and physiology. Those who need to know include all psychological and physiological professionals.

Future Directions

This was a small study. Recommendations for future studies are infinite. In my opinion, qualitative studies first, quantitative studies next. This recommendation is because of delimitations and limitations of this study.

Delimitations and limitations of this study were potential participants who met all inclusion criteria, a nonvalidated survey instrument, use of phenomenology,

and grounding the study in the transformative learning theory. The use of phenomenology and transformative learning theory were defensible. However, it is difficult to defend the small area from which participants were drawn. The next study should broaden the potential participant pool. A new survey should be developed. Reasons for these recommendations follow.

There were 10 participants who met inclusion criteria (exception being body mass index or BMI ≥ 30.0 kg/m² that was discussed). This study can now draw conclusions of what factors and how these factors initiated the process of self-management of chronic disease for this group of participants. However, what of other individuals who did not fit into the inclusion criteria: individuals younger than 50? What of other individuals not included who tried and failed to initiate self-management? What of individuals who did not attend healthcare facilities from which participants were drawn? The area outside of this southwestern metropolitan area must be broadened to encapsulate a larger geographic area, thereby increasing the demographic profile and including other variables, such as ethnicity and education. Second, an understanding of psychographics (cultural practices, mores, and beliefs) and its influence on health practices must be explored. I state this because, as a community of scholars, we need to understand why, with evidence of progression from unhealthy weight to chronic disease, an individual delays acknowledgment and personal responsibility. Third, insufficient numbers of participants in this study precluded developing relationships between these study variables: demographic characteristics (income, age), self-efficacy, and foundational beliefs, and the time period between diagnosis and initiation of self-management.

First, the TTM Stages of Change and the transformative learning theories must ground the development of a new qualitative study. The purpose of grounding a study in these two theories is to better understand the transformative process within the precontemplation stage of TTM. The potential benefit would be the acceleration of the individual's acknowledgment and acceptance of responsibility, leading to active involvement to attenuate severity, and mitigate comorbidity development.

The second recommendation should be a more divergent segment of the population. Characteristics of one's social circle need to be explored: Is there a distinction between those born and bred in the urban areas, those with less exposure to other cultural beliefs, or those with less education? Demographics that include income, multigenerational cohorts, and educational level are other areas of research.

Third, in addition to a broadening of geographical area, a more in-depth incorporation of foundational beliefs must be explored because I believe this study has just skimmed the surface of their influence.

Fourth, a broadening of the geographical area from which to draw potential participants must be undertaken.

Finally, foundational prejudices need to be explored: ageism, gender stereotyping, and ethnic typecasting. Do these prejudices hinder an individual's ability to go against cultural mores and traditions to such a degree that it may preclude self-involvement in one's health? All of these suggestions are because

current literature includes studies of homogeneous populations containing small numbers of participants. We need heterogeneity.

The fourth recommendation is to develop a new survey instrument. I strongly suggest that I did not get a full perspective on why, at first event, many of these participants did not initiate and maintain more-prudent choices in nutrition and exercise. Were there unidentified extraneous influences that precluded sustained involvement?

The ability of an individual to change the course of one's increased risk of chronic disease associated with unhealthy weight is influenced by a multifactorial influence of personal behavior, close family and friend influences, and the environment in which the individual lives. It behooves the scholarly and healthcare communities to engage in joint endeavors to guide consumers to healthier lifestyles to mitigate potentially, highly deleterious health conditions.

APPENDICES

APPENDIX A

DEFINITION OF TERMS USED IN CONTEXT

Term	Definition
Body mass index	Identified by the acronym, BMI: ratio of weight/height, expressed as kilograms per meters squared (kg/m ²).
Chronic disease	This study is inclusive of the following health conditions that have an etiology resulting primarily from obese weight (BMI Finally, participants generally agreed that poor choices of improper nutrition and lack of routine physical activity promoted chronic disease development.
Comorbidity	An accompanying health condition that likely stems from current poor health that increases the risk of other chronic disease.
Critical reflection	A critique consisting of critical assumptions or presuppositions that are the basis for personal beliefs (Mezirow, 1990).
Disorienting dilemma	A significant event in an adult's life (Mezirow, 1978) that triggers a life crisis (Cranton, 2006). Posited by Mezirow to initiate a transformative learning event (Mezirow, 1978).

Frame of reference	Foundation and compilation of individual's history, experiences and knowledge. Self-activated to assess the new (<u>Mezirow, 1978</u>).
Lifestyle-related chronic disease	Unhealthy weight resulting in chronic disease stemming from poor nutritional choices and/or physical activity.
Meaning making	Central to transformative learning: invoked for a learning experience to be "transformative." Meaning making is resolution of the disorienting dilemma through the use of new perspectives (<u>Courtenay et al., 1998</u>).
Morbidity gap	Identified as the gap between development of first chronic disease and death.
Noema - noun Noemata - adjective	Term used by Husserl (1931) to identify the <i>true</i> essence of an experience. Noematic properties of a phenomenon were not discoverable because the essence or truth remained elusive. Adjective is "noemata."
Noesis - noun Noetic - adjective	Individual's perception at single encounter with object.
Phenomenon	The individual's experience with the object of consciousness.

APPENDIX B

OPEN LETTER TO ORGANIZATIONS

IDENTIFYING YOUR CLIENT'S SUCCESSFUL SELF-MANAGEMENT TECHNIQUES OF THEIR HEALTH

Completion of Doctoral Requirements via Dissertation for the University of New Mexico, Albuquerque campus

GOAL OF THIS OPEN LETTER

I am seeking your assistance in identifying clients who have been participating in self-managing their chronic disease through active participation in your organization's activities. Self-management, for purposes of my qualitative study, includes participating in any activity. My most urgent task is securing participants for the qualitative data that addresses:

Research Questions

- What are the cognitive responses and subsequent actions that an individual with a recent chronic disease diagnosis has identified as contributory to self-management?
- How, from the perspective of the individual, have these responses and actions contributed to self-management?

I, Celeste L. Lee, am a Ph.D. candidate in the Department of Organization, Instruction and Learning Sciences (OI&LS) housed within Library Sciences at the

University of New Mexico, Albuquerque campus. I have completed all doctoral requirements. My dissertation committee is comprised of four individuals who possess integral knowledge of study content. All are professors at the University of New Mexico.

I am in possession of an approved IRB (Institutional Review Board) #05714 from the University of New Mexico, Albuquerque campus that is in the renewal and approval process.

I will now provide the background that will guide you to why I am seeking your assistance:

Dissertation Title

Initiating Self-management of Lifestyle-related Chronic Disease Resulting from Unhealthy Weight: Identifying Thoughts and Actions through Phenomenology

Problem Statement

The overriding problem and therefore the impetus of conducting this study is to address why, with evidence-based support that self-management of chronic disease can attenuate further severity and reduce risk of comorbidity development do some individuals begin a process of self-management?

Statement of Purpose

The purpose of the study is to identify the cognitive responses and subsequent actions of individuals who are proactively self-managing their chronic disease and elucidate how these responses and actions have guided them to self-management.

Participant Criteria (prospective participants must meet *all* criteria)

- Individuals aged 50+.
- Classified as obese: BMI (body mass index) ≥ 30.0 .
- Diagnosed with a nutrition and/or exercise-related disease and/or disability*) within the past six months to five years.
- Currently participating in an exercise or nutrition-related support/program.

The support/program has a range from informal → formal.

*Per my literature review, the following chronic diseases are *predominantly* the result of an obese weight condition (BMI ≥ 30.0). These include atherosclerosis, stroke, hypertension, myocardial infarction, and type-2 diabetes. Other diseases that are attributable to nutrition and exercise choices and therefore are amenable to self-management are sarcopenia, osteopenia and/or osteoporosis. Please note: the identified chronic diseases are *not inclusive* of all evidenced-based chronic disease with a nutrition/physical activity etiology.

Post my dissertation defense, as a contributor, I am willing to share my dissertation results with you. You will have qualitative study results that can guide you in further enhancing your program offerings to attract new clients and retain existing clients.

I am seeking your support and approval in selecting participants from your clients who meet the inclusion criteria. Please join me in the first step of identification.

Respectfully,

Celeste L. Lee

Celeste L. Lee

APPENDIX C

PARTICIPANT FLYER

CONTRIBUTE TO AN IMPORTANT STUDY!!!

Self-management of Your Health

- Are you aged 50+?
- Do you have an unhealthy body weight or body mass index (BMI) greater than 30.0? If you don't know, we will determine it.
- Do you have a diagnosis of chronic disease or disability (atherosclerosis, hypertension, cardiovascular disease, heart attack (MI), unhealthy triglycerides, unhealthy cholesterol, type-2 diabetes, sarcopenia, osteopenia and/or osteoporosis) that was diagnosed within the past six months to past five years?
- Have you made changes to your diet or exercise since *this* diagnosis (within the past six months to five years)?

If you answered *YES* to *all* of these questions, you *may* be eligible to participate in a research study identifying information related to these changes in your diet and/or exercise.

The purpose of this research study is to identify *your* thoughts and actions that encouraged you to make changes that increased *your* health self-management *since* the diagnosis. Compensation will not be offered. However, based upon your

responses, you become a part of this very important research.

The study is being conducted by Celeste L. Lee (MBA, MS, LN), doctoral candidate, under the direction of Dr. Victor Law, assistant professor in the department of Organization, Instruction & Learning Sciences, Library Sciences. Your information will be *confidential*, following protocol established by the University of New Mexico. You will be required to answer questions on a computer* that will be followed up with a face-to-face interview (to clarify your responses). The time commitment for you to complete your responses on the computer is 45 minutes to 1.5 hours. The face-to-face interview can be completed in one to two hours.

(*If you do **not** have a computer, I will set up a convenient time for *both* [2] face-to-face interviews). Please call Celeste L. Lee at (925) XXX.XXXX or email peppercornlee@gmail.com for more information.

APPENDIX D

INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

Interpretative phenomenological analysis (IPA) (Smith, Flowers, & Osborn, 1997; Smith et al., 1995; Smith, Jarman, & Osborn, 1999):

- Emanated from health psychology or the intersection of health, illness, and care (Johnston, 1994).
- IPA aligns with (Fade, 2004) Husserlian phenomenology (van Manen, 2014) that emphasizes an individual's experience with the individual's object of conscientiousness and consciousness. In this study, IPA aligns with the disorienting dilemma.

What is Interpretative Phenomenological Analysis (IPA)?

- IPA is one method of data analysis and interpretation of qualitative research data.
- IPA relies on the understanding the first-person perspective (Smith, Flowers, & Larkin, 2012), through suspension of reflection from the participant.

Alignment to Current Study

- First, continued reflection from participants has been presumed. This statement is evidenced by the nature of the questions (prefacing with "What"

and “how,” as opposed to “why”) in this document, covered in Chapter 3 – Methodology and Appendix Participant Survey Questions (Appendix F), discussed previously.

- IPA seeks to guide an individual’s understanding one’s transformative learning experience (as evidenced by data compilation and subsequent analysis).
- IPA aligns with Husserl’s phenomenology in that the goal of a phenomenological inquiry results in the individual developing a greater understanding of an experience with the phenomenon or disorienting dilemma.

APPENDIX E

PARTICIPANT QUALIFYING FORM

Participant Qualifying: “Self-managing *your* health: Identifying *your* thoughts and actions.”

Instructions: Click on each box to type your response.

Name					
Age (Click on a box and a “✓” checkmark will appear.)					
Age 50-55	Age 56-60	Age 61-65	Age 66-70	Age 70+	
Income/retirement (A “✓” check mark will appear in the box you click on.)					
Less than/equal to \$10,000 per year	\$10,001-\$25,000 per year	\$25,001-\$35,000 per year	\$35,001-\$50,000 per year	\$50,001-\$75,000 per year	More than \$75,000 per year
				year	
Height		Weight		BMI (leave blank)	
Health Conditions (A “✓” check mark will appear in the box/boxes you click on.)					
Atherosclerosis	Unhealthy cholesterol	Unhealthy triglycerides	Heart attack	Cardiovascular disease	
Type-2 diabetes	Sarcopenia	Hypertension	Osteopenia	Osteoporosis	
Other health conditions <i>not</i> listed					
Estimated date of poor health diagnosis?			Which health condition encouraged you to act?		
Estimated date you decided to self-manage.			Have a computer? (Use “Y” or “N” in dropdown)		
Do you use a computer? (Use “Y” or “N” in dropdown)			Use word processor program? (Use “Y” or “N” in dropdown)		
Do you have any additional comments? If so, use this space to write.					

Please remember to (a) **Save** your answers by **creating** a *new* file on your computer and (b) **send** me your document as an attachment to my email:

peppercornlee@gmail.com. Questions: Email or call (925) XXX-XXXX.

APPENDIX F

PARTICIPANT SURVEY QUESTIONS

Participant Survey Questions

“Self-managing **your** health: Identifying *your* thoughts and *your* actions.”

An open letter to you:

The information you provide is an important piece for my study. As a reminder, I will not reveal any personal information, but will use your answers as a part of my *whole* report. Thank you.

There are four sections to this survey. The *first* part of each section has questions that ask you to agree or disagree using the following key.

Please type: 1, 2, 3, or 4 indicating your response:

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Click on each box, and you will be able to select your answer: 1, 2, 3, or 4.

Example 1: “I like to pay income taxes.”

If you **strongly** disagree, you would type or write “1.”

If you **disagree**, you would type or write “2.”

If you **agree**, you would type or write “3.”

If you **strongly agree**, you would type or write “4.”

I like to pay income taxes. 1

By typing or writing “1” in the above example, you “strongly disagree” with the statement.

Here is another example:

Example 2: “I do not like spicy New Mexican food.”

If you **strongly disagree**, you would type or write “1.”

If you **disagree**, you would type or write “2.”

If you **agree**, you would type or write “3.”

If you **strongly agree**, you would type or write “4.”

I like spicy New Mexican food. 3

By typing or writing “3” in the above example, you “agree” that you do like spicy New Mexican food.

The second part of each of the four sections asks you to provide more information, using the box provided with each question. Give detail, as much as you can for each survey question.

Once you answer the questions, PLEASE do *not* change your answers. I'm looking for your first (initial or "gut") response.

Please remember: ALL information you provide is confidential.

Let's begin. Please respond without your first thoughts. Again, here's the key:

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Section 1: Growing Older

Statement	Your Response
The opinions of others about <i>me</i> are important to me.	
As I get older, remaining healthy is important.	
I don't want others to help me.	
As I get older, I can't do much about getting some permanent disease.	
Not every older person has unhealthy weight.	
What others feel about me is important to me.	
As I get older, I am not comfortable with trying out new activities.	
The older I get, the more pain I will get.	
I do <i>not</i> want others to help me.	
Getting older, I will get a disease.	
As I get older, I don't care about how I feel.	
As I get older, I can't do much about having pain.	
I do <i>not</i> like others to see me as needing help.	
I am trying to reduce the seriousness of my health condition.	
I rely more on other people to help me.	

What are your *personal* feelings, thoughts, and beliefs about getting old?

How have these feelings, thoughts, and beliefs influenced your activities and actions? Since you have started managing your health, have you changed your feelings, thoughts, or beliefs?

How have your beliefs, thoughts, and feelings matched up to *your* actual experiences?

Section 2: Unhealthy Weight and Poor Health

Again, please use this key to answer.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Statement	Your Response
Not all older people get a disease.	
I feel that I can control how healthy I am.	
My unhealthy weight is because I am older.	
I can't help my unhealthy weight.	
I could have exercised to prevent unhealthy weight.	
There is nothing I did to get poor health.	
My unhealthy weight caused my pain.	
I believe that being older caused my poor health.	
My unhealthy eating caused my unhealthy weight.	
There is nothing I could have done to prevent my poor health.	
The older you get, the less control you have over getting sick.	
I believe I could have done something to avoid having pain.	
My unhealthy weight caused my disease.	
I believe I could have done something to avoid my unhealthy weight.	
I am responsible for my unhealthy weight.	
I am responsible for having a disease.	
I am responsible for having pain.	

What thoughts or activities do you think caused your unhealthy weight (please provide details)? Looking back, were there other things you could have done? Are there other things you could have *avoided*?

Section 3: The Change Process

This key will help you in responding to these questions.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Statement	Your Response
I had to do something to get better health.	
In making changes, I feel better about myself.	
I could not have made changes without someone to guide me.	
I knew that I could reduce my weight to a healthy weight.	
I knew I could help myself become healthier.	
I am responsible for my future health.	
I didn't know that my food choices could make me sick.	
I need reassurance from others that I was doing "well."	
I could not have made changes without someone to support me.	
I didn't know that a lack of exercise could cause health problems.	
I know eating good foods will help keep my weight healthy.	
I need to exercise most days of the week.	
I feel that I control my health.	

Before your doctor (or other health person) told you about your poor health, how did you feel about your unhealthy weight? After you got sick or developed pain, what were your thoughts about your (a) your weight, (b) your poor health, and (c) the relationship between unhealthy weight and your poor health?

How did these thoughts get you to make decisions about losing weight? How do you think your thoughts motivated you?

What were some of the issues you thought about after you started experiencing poor health? Describe *what* you felt after you understood you have poor health.

Describe *how* you currently manage your chronic disease. What are some of the activities that have changed? How do you feel making these changes?

What are your feelings that your own actions were responsible for you becoming sick or developing pain?

How have you felt about your unhealthy weight?

What was the *most important* event/thought that got you to a healthier weight?

Before you developed your chronic disease, how did you feel about (a) eating better, (b) getting regular exercise, (c) your weight, *and* (d) any other personal choices?

How have time, money, and convenience affected your decisions and actions to make changes to your choices?

--

Complete this table by detailing your thoughts and activities of the change process from *prior* to diagnosis to *current* participation in your own self-management (you do NOT need to fill in all the spaces).

First	
Second	
Third	
Fourth	
Fifth	
Sixth	
Seventh	
Eighth	
Ninth	
Tenth	

Section 4: The Present

What are some words that describe you *now*? Describe how you feel about living with your disease or poor health? Please use words that describe how you view, think, and feel about yourself!

What are your thoughts about your activities in managing your health? How have these thoughts changed you?

Thank you. This is the end of your survey. I will contact you in 24-72 hours to schedule another appointment to review your responses. I may ask you for more details to some of your responses.

Please remember to (a) **Save** your answers by **creating** a *new* file on your computer and (b) **sending** your document to me as an attachment to my email:

peppercornlee@gmail.com. Questions: Email or call (925) XXX-XXXX.

APPENDIX G

LIKERT-SCALED QUESTIONS BY CATEGORY

Questions of High Self-efficacy

- I feel that I control my health.
- I feel that I can control how healthy I am.
- In making changes, I feel better about myself.
- I knew that I could reduce my weight to a healthy weight.
- I knew I could help myself become healthier.
- I am responsible for my future health.
- As I get older, remaining healthy is important.
- I don't want others to help me.
- I do not want others to help me.

Questions of Low Self-efficacy

- The opinions of others about me are important to me.
- What others feel about me is important to me.
- I could not have made changes without someone to guide me.
- I do not like others to see me as needing help.
- As I get older, I am not comfortable with trying out new activities.
- I rely more on other people to help me.
- I need reassurance from others that I was doing "well."

- I could not have made changes without someone to support me.
- I am trying to reduce the seriousness of my health condition.

Foundational Beliefs -- Aging, Disease, Pain, and Disability

- As I get older, I don't care about how I feel.
- Not all older people get diseases.
- My unhealthy weight is because I am older.
- I believe that being older caused my poor health.
- As I get older, I can't do much about getting some permanent disease.
- Not every older person has unhealthy weight.
- The older you get, the less control you have over getting sick.
- Getting older, I will get a disease.
- The older I get, the more pain I will get.
- As I get older, I can't do much about having pain.

Foundational Beliefs -- Personal Responsibility

- I am responsible for my unhealthy weight.
- There is nothing I did to get poor health.
- There is nothing I could have done to prevent my poor health.
- I can't help my unhealthy weight.
- My unhealthy weight caused my pain.
- My unhealthy eating caused my unhealthy weight.
- My unhealthy weight caused my disease.
- I believe I could have done something to avoid my unhealthy weight.

- I am responsible for having disease.
- I am responsible for having pain.
- I had to do something to get better health.
- I could have exercised to prevent unhealthy weight.
- I believe I could have done something to avoid having pain.

Foundational Beliefs -- Lifestyle Choices

- I didn't know that my food choices could make me sick.
- I didn't know that lack of exercise could cause health problems.
- I know eating good foods will help keep my weight healthy.
- I need to exercise most days of the week.

APPENDIX H

RESEARCHER EPISTEMOLOGY

I have put forth my personal epistemology or the influences and foundational development of my knowledge to be upfront about my subjectivity. My perspective, as the sole researcher for this study, is biased. Regardless of the degree to which I have suspended personal reflections, my perspective has been comprised of reflections of experiences (Moustakis, 1994b) that create my reality. All knowledge has passed through any current perspective of knowledge that I hold (van Manen, 2014). I have accepted new knowledge as true, if, when compared to current knowledge of the subject matter, the statement is congruent with my existing knowledge (Moustakis, 1994b; van Manen, 2014). Conversely, I have deemed that some knowledge is not reflective of truth if, after reflection, the statement is not congruent with existing knowledge. I also have believed that confirmation of false is not an option.

My reality is fluid; therefore, any current foundational frames of reference of knowledge are fluid. As expressed by Husserl (1931) I have accepted that my reality is only a representation of the truth, in an instant. Further, my reality is not wholly unconstrained. There are boundaries to the limits of the amplitude to which reality can rise and fall, constrained by my logic. Within the range, there is much opportunity to extend the boundaries of “truth.” This has been acceptable because it enables me to have accepted a wider variety of opinions, allowing for consideration

of other perspectives and the possibility of new knowledge. Were I, the researcher, to have quashed new points of view or new information, there would have been a fixed reality, closed to the opportunity for new knowledge that would have changed reality. In a less constrained environment, I have been psychologically prepared to experience temporary discord and have managed the resultant physiological responses as new input was processed. I have asked, "Why did that person put forth this viewpoint?" My forthrightness in putting forth this information provides evidence that I have acknowledged my subjectivity. In doing so, acknowledgment has also cautioned me to exercise objectivity through consciously keeping an open mind, of being in that world of a participant's experience, and not in the world of preconceptions and judgments.

My researcher assumptions include the following: (a) I believe in the voracity of the participant, that the participant is wholly forthright, honest, and states, to the best of one's knowledge, an accurate representation of the thoughts and action that led to participating in self-management of a chronic disease; (b) I believe I am able to bracket existing prejudices (prior knowledge and prior experience); (c) I accept that (as evidenced by literature reviews of the association) participants' chronic disease emanated primarily from poor lifestyle choices of nutrition and/or exercise; (d) I know that the inclusion criteria developed for potential participants will create usable, relevant, and good data to reduce the risk of chronic disease; and (e) through research, I accept that the potential for symptom severity reduction is possible.

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