I CAN SUPPRESS THE PAIN, BUT THEN WHAT?
SEEKING RESOLUTION TO CHRONIC MUSCULOSKELETAL PAIN
AMONG IMMIGRANTS FROM CHINA

by

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ABSTRACT

Chronic musculoskeletal pain is a common problem among working aged adults (McIntosh & Hall, 2007). It reduces quality of life, is challenging to diagnose and treat, and incurs a significant economic burden on society (Woolf & Pfleger, 2003). Evidence indicates that one’s cultural background has major relevance in their pain experience and associated coping behaviours (Gatchel et al., 2007). To date, studies investigating cultural influences in musculoskeletal pain have primarily taken a deductive and quantitative approach in accessing culture, which can limit the researcher from acquiring a rich and contextualized picture of an ethnic culture (Waldram, 2006). The current study aims to construct knowledge about a large but under-researched ethnic minority group in Canada—immigrants from mainland China—using Constructivist Grounded Theory (Charmaz, 2006), a methodology that allows for the accessing of cultures in a contextualized and naturalistic form. Twenty-four first-generation immigrants from mainland China living in Metro Vancouver, Canada, with chronic musculoskeletal pain were interviewed about their pain management experiences. Through theoretical sampling, coding, writing and sorting memos, and diagramming, concepts were constructed and formed into a theoretical framework explaining how immigrants from China (ICs) manage chronic musculoskeletal pain. Results indicate that ICs try to resolve their pain by being cautious (i.e., opting for low-risk methods), self-reliant (i.e., handling the pain on one’s own), proactive (i.e., actively seeking information and solutions), and critical (i.e., evaluating medical opinions, recommendations, and services). Those with mild pain self-manage using mainly cautious and self-reliant approaches, whereas those with severe pain also use proactive and critical approaches. These approaches are informed by underlying pain-related beliefs (e.g., that medications are toxic), moral values (e.g., one ought to face pain courageously), and
memories of accessing healthcare in China. Furthermore, results suggest that ICs, over time, develop experiences and insights about pain management, forming an attitude of self-efficacy and pain acceptance. To evaluate the level of contribution of current results to the field, key findings of the study were compared with what is known in the extant literature. The study’s possible contributions to the pain management literature, potential utility for practitioners, and methodological limitations are discussed.
LAY SUMMARY

Research shows that chronic pain experience and management are influenced partly by one’s ethnic cultural background. To date, most studies investigating this relationship use a quantitative research method that tends to over-simplify cultural elements. The current study aims to investigate cultural processes in an under-researched cultural group in Canada – immigrants from China (ICs)—using a method that captures culture in a rich and contextualized manner. Twenty-four adult immigrants from China were interviewed about their chronic pain experience and management. Through an iterative process of data collection, data analyses, and further data collection, concepts and themes were constructed, forming an overarching theory. Results show that ICs try to cautiously, self-sufficiently and proactively seek resolution to their chronic pain and critically evaluate pain-related information and recommendations. Over time, ICs develop self-efficacy about their pain management and acceptance about their pain. Contributions to the literature and limitations of the study are discussed.
PREFACE

This dissertation is authored solely by Ada Law, who conducted, under the supervision and guidance of her committee, all phases of the project, including conceptualization and design of the study, the execution of the data collection and analyses, and the writing of the report. The Mandarin Chinese interviews were primarily transcribed by Sophie Zhu. The study described in this dissertation has been approved by UBC Behavioural Research Ethics Board (UBC BREB Number: H16-01401).
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Chapter 1: Introduction to the Research Topic

What should one do about occasional back pain? How should one deal with a stiff shoulder that lasts for days? One might reach for analgesic medicine to quell the pain, and not give it a second thought, while another person might become consumed by shame for not having taken better care of their own body.

Although pain is a phenomenon with an objective physiological basis, it is also a subjective, idiographic experience (Gatchel et al., 2014; Merskey, 1991; Turk & Monarch, 2002). Two people could have the same bodily injury but perceive very different qualities of pain and attributing different meanings to their pain experiences (Melzack, 2001). They each may have a different idea for what the pain is due to, as well as different values about how to deal with the pain, and subsequently act in the way that makes the most sense to them (Gatchel et al., 2007; Leventhal et al., 2003). The way we experience and respond to pain is informed by our knowledge, past experiences, values, and cultural background.

Musculoskeletal Pain: A Complex Health Problem

Musculoskeletal (MSK) pain, or pain associated with the muscles, tendons, ligaments, or bone structure, is one of the most common, and difficult to treat, types of pain (Schultz & Gatchel, 2005). From a healthcare perspective, the origin of a person’s musculoskeletal pain is often ambiguous and nonspecific (Krismer & van Tulder, 2007), making it difficult for medical professionals to give clear diagnoses (McCarthy et al., 2004). In developed countries such as Canada and the U.S., musculoskeletal pain is estimated to have a 70% lifetime prevalence rate (McIntosh & Hall, 2007; Woolf & Pfleger, 2003). It has proven to be a major economic and social burden. In British Columbia, for example, work-related musculoskeletal injuries and pain comprise over half of the work-related disability claims (WorkSafeBC, 2019). Those who are
afflicted with such injuries and are unable to achieve a timely recovery are at risk of developing a permanent disability (Crook et al., 2002; McIntosh & Hall, 2007). Therefore, pain researchers over the past few decades have paid close attention to early interventions targeting modifiable factors that affect recovery (Schultz, Chlebak et al., 2016; Schultz, Law et al., 2016).

MSK pain can be a highly psychological and social experience. When it persists, it can lead to decreased mental health, poor social role functioning, negative self-identity and low self-worth, which in turn can further the pain experience, rendering it more entrenched and difficult to treat (Gatchel, 2005; Turk & Monarch, 2002). In this manner, the musculoskeletal pain becomes an increasingly complex and contextualized set of negative experiences. Research indicates that after several months of persistent MSK pain, it is considered to be chronic and tends to become more intractable, difficult to treat, and disabling (Schultz et al., 2005).

Cultural Variations in Musculoskeletal Pain: Clinical Relevance

Current best practice guidelines for healthcare providers for treating musculoskeletal pain involve active strategies like physiotherapy, education about pain medication use, and behavioural therapy (Koes et al., 2010; Oliveira et al., 2018). This multidisciplinary approach stems from a wealth of empirical evidence from clinical and theoretical research (Björnsdóttir et al., 2018; Fedoroff et al., 2014; Kamper et al., 2014; Sullivan & Stanish, 2003). It emphasizes early intervention, active engagement, and personal responsibility for one’s recovery (Schultz et al., 2000).

Although the psychosocial and multidisciplinary treatment approach has been a breakthrough in the field and is considered to be the most evidence-supported approaches available, its success is still only moderate and is not without shortcomings (Gatchel & Okifuji, 2006; Geisser et al., 2006; Kamper et al., 2014). One limitation to multidisciplinary pain
treatment programs is that its guiding principles, such as the idea, *hurt does not equal to harm*, had originated primarily from Western scholarly perspectives, and therefore may not fit with the worldviews of other cultures (Hatala, 2012; Kirmayer, 2012; Korol & Craig, 2001; Schultz et al., 2000). Without examining how individuals of other cultures conceptualize, experience, and deal with chronic musculoskeletal pain, researchers remain in the dark about whether or not such approaches are appropriate and effective for persons with pain.

**Focusing on Specific Cultural Groups**

An in-depth understanding of how certain cultures understand and deal with chronic pain is important in several respects. First, it would help bridge differences in expectations about treatment between the healthcare practitioner and the patient. Studies show that sharing of common goals and understandings between client and provider help facilitate successful intervention outcomes (La Roche et al., 2011; Verbeek et al., 2004), whereas differences in beliefs about pain could compromise treatment effectiveness (Brown, 2009). In fact, psychosocial treatments that incorporate client’s cultural beliefs, metaphors, and worldview into therapy is associated with increased treatment benefits for ethnic minorities (Huey et al., 2014).

Second, contextualized pain-related information can be used to create culturally appropriate pain assessment measures (Booker et al., 2016). For example, in a large-scale study by Peláez-Ballestas et al. (2014), a pain measure was created based on qualitative interviews with patients with rheumatoid arthritis from several Latin American countries. After a process of statistical testing, the scale was found to be a valid screening measure for rheumatoid diseases in Latin American populations. In a similar manner, knowing how a certain cultural group

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1 “Cultural group,” in the current study means a group of a particular ethnic culture, and can be widely encompassing, such as “Italian Canadians” or more specific, such as White adolescents living in upstate New York. The current study recognizes that the definition of a cultural group is not limited to ethnicity, but any group that is socialized and living in a certain social context. Hence, non-ethnic cultural groups are also possible, such as professional football players or older adults in the gay community.
understand chronic pain through directly accessing the individual’s thoughts and perceptions would allow researchers to develop measures that fit with this group’s worldview about pain.

Third, it benefits scholarly understanding. Rich qualitative data about the values, morals, preferences, and beliefs related to pain management would enhance theoretical understandings about the relevance of culture in pain management. It would also benefit scholarly understanding of that specific culture.

The Current Study

The population in Canada is increasingly diverse with respect to ethnicity and heritage. Immigrants are currently responsible for 65% of growth in the working sector, and this number is expected to rise to 80% by around 2030 (Yssaad, 2012). Upon arriving in Canada, these individuals are likely to engage in physical labour jobs that carry a high risk for injuries (Smith & Mustard, 2009). With a growing immigrant population that is at risk of developing musculoskeletal injuries, healthcare providers need to be well-equipped with culturally-appropriate knowledge in order to maintain a high standard of care (Encandela, 1993).

Immigration is a process that can shape health beliefs (Mukherjea et al., 2013). Those who migrate to another country bring with them tacit meanings about how one ought to manage health conditions, such as musculoskeletal pain, and these meanings may be further shaped by their new social context. Insights into these tacit meanings and how they may change would inform practitioners’ work in providing immigrants and ethnic minorities with appropriate chronic pain treatment (Betancourt & Green, 2010; Huey et al., 2014). However, few studies to date have devoted in-depth exploration about the management of chronic pain among immigrant groups.
Immigrants from China (ICs) are a relevant group to investigate, given their large representation in Canada. China is currently the largest source country of immigrants to Canada, and Chinese is the most commonly identified first language other than English and French (Government of Canada, 2017). Chinese immigrants also come from a social, political, geographical, and economic climate that is quite different from that of Canada, and likely hold beliefs, preferences, and values about pain management that are different from those of mainstream North American society. For example, Chinese Americans tend to place significant value in emotional stoicism and concealment of health issues from those outside of one’s family, and may be less likely to seek help from the healthcare system (Tung & Li, 2015). These cultural tendencies pose potential barriers to appropriate and timely treatments, which would be detrimental to the well-being of the patient with pain and frustrating for well-intentioned healthcare providers.

The current study addresses this issue by exploring the cultural underpinnings of chronic MSK pain management among immigrants from China. Specifically, it aims to identify and understand relevant social processes, such as values, assumptions, preferences, and goals regarding managing chronic MSK pain within the Canadian context. Findings are expected to inform treatment practices for this growing population in Canada.

Overview

The current dissertation is organized into five chapters. Following the current introduction (Chapter One), I provide in Chapter Two a critical review of the foundational literature in psychosocial and cultural aspects of pain. The review highlights the comprehensiveness of the psychosocial literature on pain while demonstrating the scarcity and methodological shortcomings of the current research on culture and pain. Hence, the research
problem, which pertains to the limitations of cultural research in pain management, is concluded at the end of the review. In Chapter Three, I explain my choice of methodology—constructivist grounded theory (Charmaz, 2006)—for addressing the research problem and describe the steps with which I construct my grounded theory of pain management among Chinese immigrants. Specifically, I outline my social constructionist perspective of social reality and my procedure of data collection and analysis. In Chapter Four, I provide a detailed narrative and diagrammatic representations of the resulting theoretical framework, Culturally Informed Pain Management among Immigrants from China (CIPMIC). Finally, in Chapter Five, I discuss the potential scientific contribution of the current study by highlighting the similarities and differences between my findings and knowledge in the extant literature. As well, I consider the possible clinical applications of the current results and reflect on the shortcomings of the current study.
Chapter 2: A Review of Foundational Literature

The current study seeks to understand how a group of people of a particular culture, namely, immigrants from China, experience and deal with chronic musculoskeletal pain. It makes a fundamental assumption that a person’s ethnic cultural background has important influence on the process of pain management. This assumption is supported by a diverse group of studies showing that pain is a social phenomenon that is imbued with subjective meanings (e.g., Bates & Rankin-Hill, 1994; Craig, 2009; Eccleston et al., 1997; Fabrega & Tyma, 1976; Kodiath & Kodiath, 1992; Sullivan, Scott, et al., 2012). The purpose of the current chapter is to delineate and critique this literature and to show that rigorous cultural analysis of pain management is a fruitful, but rarely conducted, line of inquiry.

The current chapter begins with a review of literature indicating that pain is not only a physiological phenomenon, but also a social one. It introduces the biopsychosocial model of pain, a widely supported theoretical framework that thoroughly explains some of the social factors of chronic pain (Kamper et al., 2014; Pincus et al., 2013). It then highlights a gap in the biopsychosocial literature—a relatively small amount of investigations on how culture exerts its influence (Hatala, 2012). This issue is underscored with an acknowledgment of existing cultural studies and a critical examination of their methodological approaches. This chapter closes with an explanation of what the current study aims to achieve.

Pain: A Phenomenon Both Physical and Social

Traditionally, scientists have conceptualized pain as strictly a physiological phenomenon that occurs independently from psychosocial processes. This line of thinking had stemmed from Rene Descartes’ idea of dualism in the medical field, in which the mind and the body are considered to be separate entities (Fancher, 1996; Schultz et al., 2000; Wade, 2006). Scientists
became increasingly aware, however, that pain experience can occur in the absence of corresponding tissue damage, and that processes other than physiological ones could be at play (Gatchel et al., 2014; Raja et al., 2020).

Psychiatrist and scholar, George Engel, believed that in cases where the pain cannot be explained by medical methods, pain experience is psychological in nature. He named this type of pain *psychogenic*, or generated by mental health and emotional conflicts (Engel, 1959). Engel’s theory of psychogenic pain implied that pain falls on either side of a dichotomy – either it is observable and “organic” or imagined and psychogenic (Creed et al., 2011; Hardcastle, 1999; Wade, 2006). Over the years, research has found minimal evidence supporting this dualistic view (Hardcastle, 1999; Schultz et al., 2000; Sternbach et al., 1973) and terms such as physical or “organic” pain and psychogenic or functional pain have been increasingly recognized as lacking in validity (Creed et al., 2011; Gatchel & Dersh, 2002). Nevertheless, Engel’s acknowledgement of psychological factors in physiological symptoms has led to a major shift in the field of medicine towards a multi-faceted view of physical illnesses (Hatala, 2012).

Beginning in the late 1990s, researchers have incorporated psychological components into the definition of pain. For example, after reviewing evidence in the past several decades, the International Association of the Study of Pain (IASP) has updated the definition of pain as an unpleasant experience that is due to tissue damage or something that is perceived to resemble such damage (Raja et al., 2020). Pain, as a human phenomenon, was increasingly being recognized as a subjective experience rather than simply a biological event that can be objectively determined (Turk & Monarch, 2002). Moreover, psychological and physical aspects of pain are inter-influencing and cannot be neatly separated as one tries to understand a person’s pain experience (Gatchel & Dersh, 2002; Melzack, 2001). The idea that emotional, cognitive,
and physiological factors are all integral to the experience of pain was gaining acceptance in the medical field. In keeping with this paradigm shift, the diagnostic guidelines for the mental health profession for pain-related mental disorders have also evolved. Within the Diagnostic and Statistical Manual of Mental Disorders editions, the labels *psychogenic pain disorder* in the 1960s and *pain disorder with psychological factors* in the 1990s, have been replaced by the new diagnostic label, *somatic disorder with predominant pain*, reflecting practitioners’ movement away from the dualistic view of chronic pain (American Psychiatric Association, 1968, 2000, 2013).

**Psychological Aspect of Pain: Evidentiary Support**

The growing recognition of pain as a subjective and idiographic phenomenon has inspired much research about psychological processes and individual differences in regards to pain. For example, significant attention has been placed on the concept, cognitive appraisal of pain, which owes part of its origin to cognitive psychological theory (Lazarus & Folkman, 1984). It has been shown that individuals who appraise, or perceive, their pain experience as threatening or beyond their capacity to handle, they would attribute greater danger and negativity to the pain, which in turn exacerbates their pain experience (Asmundson & Taylor, 1996; Cheng & Leung, 2000; Lin et al., 2013; Sullivan & Stanish, 2003; Wideman et al., 2009). A pain coping style that draws from this concept is *catastrophizing*, or the tendency to dwell on one’s pain experience, perceive hopelessness in regards to the pain, and attribute catastrophic consequences to the pain (Sullivan et al., 1995). Cross-sectional studies (e.g., Cheng & Leung, 2000; Gillanders et al., 2013) and longitudinal data (e.g., Burton et al., 1995; Velly et al., 2011) collectively show that individuals who expect catastrophic consequences to their pain and believe that they are helpless in its presence are likely to experience greater pain intensity and
disability, as compared to those who do not hold such beliefs. In fact, treatments that target individuals’ catastrophization tendencies are more likely to show reduction in their pain experience (Fedoroff et al., 2014; Sullivan, Adams, et al., 2012). The relevance of catastrophization in pain experience is evidenced by both patients’ self-reported experience (Sullivan et al., 1995) and in neurological findings among those with strong tendencies to catastrophize about pain (Edwards et al., 2006).

Another type of cognitive appraisal of pain that has garnered scholarly attention is locus of control, or the belief that a person or an outside source has control over their own outcome (Lefcourt & Davidson-Katz, 1991). Research has found that those who attribute the control over their pain to an outside source (i.e., external locus of control) tend to see themselves as being more disabled by their pain (Cheng & Leung, 2000). On the other hand, those who perceive a greater sense of control over their pain (i.e., internal locus of control) tend to show greater benefit from rehabilitation interventions (Jensen et al., 2007). In light of these findings, psychosocial interventions for chronic pain have focused on shifting the individual’s locus of control about pain towards their own self (Coughlin et al., 2000; Lipchik et al., 1993). Research also shows that pain-related beliefs and attitudes influence how well one copes with the pain. Individuals who hold more positive expectations about their recovery tend to show more improvement in their functioning (Gross & Battié, 2010; Jensen et al., 2007; Schultz et al., 2004), whereas those who see themselves as disabled or are fearful of reinjury tend to show more disability when assessed at a later time (Schultz et al., 2004; Wideman & Sullivan, 2011).

Studies mentioned above show that psychological processes, such as personality traits, play an important role in the overall picture of pain experience. To date, many other psychological constructs have also been found to have relevance in pain, including anxiety
sensitivity (Asmundson & Taylor, 1996), preoccupation about health (Truchon & Fillion, 2000), perceptions of injustice (Sullivan, Scott, et al., 2012), perception of self as a burden (Kowal et al., 2012), as well as mental disorders such as depression (Brede et al., 2012; Iles et al., 2008), anxiety (Asmundson & Katz, 2009), and substance use disorders (France et al., 1986). These accumulated empirical findings have provided foundational support for the psychological dimension of pain.

**Social Aspects of Pain: Evidentiary Support**

In addition to personality tendencies and beliefs, contextual factors such as social support are also relevant in the experience of and recovery from musculoskeletal pain (Brede et al., 2012; Hooten et al., 2012; Schultz et al., 2004). For example, studies suggest that a worker’s ability to make a timely return to work despite musculoskeletal pain is influenced by the quality of their family support (Kuijer et al., 2006), sense of belongingness in society (Sabbioni & Eugster, 2001), job satisfaction (Truchon & Fillion, 2000), perceived workplace fairness, and level of managerial involvement (Wagner et al., 2014). These studies underscore the fact that the quality of a person’s social environment can meaningfully influence how pain is experienced.

Research also suggests that the quality of one’s pain experience is implicated by their social and demographic characteristics. For example, being a new immigrant (Sabbioni & Eugster, 2001), of visible ethnic minority (Hooten et al., 2012) or involved in a disability compensation claim (Kertay & Pendergrass, 2008; Rohling et al., 1995) are factors that are statistically associated with a more severe pain experience. Pain-related problems such as poor self-care, mental health challenges, and low service utilization are also related to one’s gender (Weir et al., 1996), socioeconomic situations, and citizenship status (Krupic et al., 2013).
In addition, research shows that one’s experience of caregivers’ behaviours influences their experience of pain (Craig, 2009). Laboratory experiments have found that an individual who is exposed to people exhibiting a high pain tolerance are likely to report less pain and demonstrate greater acceptance and lower physiological reactivity in response to electric shocks, compared to those exposed to a neutral person (Craig & Prkachin, 1978; Craig & Neidermayer, 1974). Other investigations have found that being in the presence of people of the same ethnicity leads to more intense pain expressions (Hsieh et al., 2011), while being around someone of high status diminishes the distress from pain (Campbell et al., 2006; Kállai et al., 2004). These studies highlight the relevance of various dimensions of social context in one’s pain experience and coping.

**Biopsychosocial Model of Pain: Description and Application**

The growing evidence showing that pain is complex and multidimensional has led to the development of the biopsychosocial model, which describes pain as a human condition that results from the interplay between physical and psychosocial components (Engel, 1992; Gatchel & Dersh, 2002; Schultz et al., 2000; Turk & Monarch, 2002). According to Gatchel and colleagues’ model, the quality of one’s sensation of pain is influenced by their early learnings and cultural context (Gatchel et al., 2014). Over time, pain becomes chronic and increasingly distressing due to the development and worsening of interpersonal problems, such as lack of social support and employment stress, and intrapersonal difficulties, including depressed mood and anxiety (Gatchel et al., 2007; Turk & Monarch, 2002). When pain is not effectively dealt with, the individual’s psychosocial distress compounds, leading to problems of anxiety, depression, and substance use, which in turn results in a more heightened and debilitating pain experience (Gatchel & Dersh, 2002). Supporting this theory are findings about the
psychological and social predictors of pain-related disability (Hendriks et al., 2005; Iles et al., 2012; Kuijer et al., 2006; Schultz et al., 2004; White et al., 2013; White et al., 2015) and the psychosocial processes involved in the development of chronic pain following a musculoskeletal injury (Boersma et al., 2014). The biopsychosocial model takes on a multi-level and interdisciplinary approach in conceptualizing pain, combining empirical evidence of cellular physiology, emotional and cognitive mechanisms, and environmental and social processes (Gatchel et al., 2014; Hatala, 2012).

The biopsychosocial model of pain has made significant contributions to clinical practice. For example, it has informed the development of evidence-base interventions for chronic pain conditions, such as cognitive and behavioural therapy (Fedoroff et al., 2014; Sullivan, Adams, et al., 2012). Such interventions, when given in a timely manner, are effective in improving occupational functioning and quality of life for the injured individual (Iles et al., 2012; Kamper et al., 2014; Loisel, 2002; Schandelmaier et al., 2012). Another clinical contribution of the biopsychosocial model is its role in clarifying diagnosis and classification of pain conditions. For example, in the past two decades, it has been used by the World Health Organization’s International Classification of Functioning, Disability, and Health to understand musculoskeletal disability (WHO-ICF; World Health Organization, 2001). In keeping with the biopsychosocial model, the WHO-ICF guideline considers social context when determining disability. For example, an individual who is unable to stand due to low back pain is regarded as less disabled when there is a supportive attitude towards their back pain, as compared to a person with the same impairment but is surrounded by a family who is judgmental and unsupportive. This manner of conceptualizing disability, in which social context is also considered, allows
healthcare providers to construct a “broad and meaningful picture” of an illness condition, thereby informing clinical intervention (Peterson, 2005, p. 105).

In addition to clinical practice, the biopsychosocial model has also contributed to policy development and program evaluation for insurance systems and other stakeholders. For example, a closer look at psychological and social predictors of pain-related disability has helped develop an algorithm for predicting return to work among those with low back injuries (Gross et al., 2016; Heymans et al., 2009). Other studies have focused on social processes within return-to-work among disability insurance claimants, such as recovery through cognitive behavioural therapy (Sullivan & Stanish, 2003) and constructing expectations for returning to work (Stewart et al., 2012). These studies collectively aided the development of practice guidelines for medicolegal practitioners and policy makers (Schultz, Chlebak, et al., 2016; Wagner et al., 2014; White et al., 2013).

In summary, the biopsychosocial model is a well-supported integrative framework for understanding chronic pain. It has contributed significantly to treatment practices, compensation of injured workers, and predicting clinical outcomes of those with musculoskeletal pain and injury. It has become an important theoretical model within the field of pain research.

**Importance of Culture in Musculoskeletal Pain**

Although the biopsychosocial model has offered a multidimensional and comprehensive lens in understanding and treating musculoskeletal (MSK) pain, its focus on cultural factors have been relatively limited (Hatala, 2012; Hilty, 2015; Suls & Rothman, 2004). Incorporating a patient’s cultural background into understanding their chronic MSK pain would allow a practitioner to gain a fuller picture of the problem (Schultz, Chlebak et al., 2016). For example, consider a patient who expresses feeling helpless and overwhelmed by their chronic low back
pain. Evidence on personality traits would suggest that they have a low level of internal locus of control (Coreil & Marshall, 1982). When assessed with considerations of their sociocultural context, however, their pain coping response may be viewed as quite appropriate and adaptive. Given the importance of one’s beliefs about pain on recovery success (Hepp et al., 2011), research that illuminates beliefs about chronic pain among certain cultures would be greatly beneficial to clinicians.

To date, best practice guidelines for treating chronic MSK pain are relatively silent in the discussion of how culture influences one’s perceptions of and responses to MSK pain (for example, see Ernstzen et al., 2017; Kamper et al., 2014; Oliveira et al., 2018; Wagner et al., 2014; White et al., 2013). This is unsurprising given that empirical studies for specific ethno-cultural groups are limited in number and have inconsistent approaches to defining culture, the latter of which makes application of empirical findings challenging.

**Cultural Differences in Musculoskeletal Pain: What is Known Thus Far**

The few studies that are available provide interesting insights about the potential cultural differences in pain experiences and associated coping behaviours. In studies of patients with chronic musculoskeletal pain in the U.S., for example, Bates and colleagues found differences in self-reported pain intensity among Americans, Latinos, French Canadians, Italians, Irish, and Polish (Bates et al., 1993; Bates & Rankin-Hill, 1994). In addition, variations in self-reported coping styles were found. Specifically, whereas Polish patients tend to report an internal locus of control, or a perception that they have personal control over their pain, Latino patients tend to report an external locus, or a belief that the pain is outside of their control (Bates & Rankin-Hill, 1994). In another study, African and Hispanic Americans reported a greater use of prayer and hope as a coping strategy, as compared with Caucasian Americans (Edwards et al., 2005).
Differences have also been observed between ethnic minority and majority groups in regards to recovery from pain conditions, with ethnic minorities showing worse outcomes (Hooten et al., 2012; Krupic et al., 2013; Sabbioni & Eugster, 2001). These studies indicate that cultural contexts likely play a role in pain-related coping behaviours and experiences.

Research using laboratory-induced pain has also confirmed ethnic differences in pain responses. A systematic review of 24 such studies yielded a consistent finding of moderate to large effect sizes for the link between ethnicity and pain tolerance among Caucasian, African, and Hispanic Americans (Rahim-Williams et al., 2012). In a cross-cultural study of South Asian and Caucasian males, Watson et al. (2005) found higher reports of unpleasantness and greater sensitivity to experimental pain among the former group. Similarly, a study comparing Chinese-Canadian and European-Canadian young adults found the former group reporting more pain than the latter group during a laboratory pain stimulus, and that differences in pain catastrophizing scores partly accounted for this effect (Hsieh et al., 2010).

Researchers have explored reasons for the observed ethnic group differences in pain experiences and coping styles. Some findings show that language and acculturation lead to difficulties with accessing health services among pain sufferers of an ethnic minority group (Patel et al., 2009; Sabbioni & Eugster, 2001). Others suggest that ethnic group differences could be explained by patient factors or healthcare provider factors. For example, Ng et al. (1996) reviewed hospital charts and found a difference in the amount of analgesics prescribed to African, Caucasian, or Hispanic post-operative patients by healthcare staff. The authors noted that the differences could stem from either differences in pain behaviour of the patients or in healthcare providers’ perception and treatment of the patients. Other studies have found that different ethnic groups may experience and manifest distress differently. Physicians in the
United Kingdom, for example, report that patients with pain and of South Asian background tend to present with more psychosomatic symptoms as compared to patients with pain and of Western European background (Patel et al., 2008). Rogers and Allison (2004), on the other hand, found that while South Asian individuals regard pain as a sign of fragility and prefer to cope by abstaining from activities, African-Caribbean individuals see pain as stress-related and opts for distraction as a coping strategy. Ethnic differences in perceived control over pain are also believed to be reflective of cultural processes. Evidence suggests that having a helpless and passive attitude towards recovery from pain is considered normal and appropriate among certain cultural groups (Bates & Rankin-Hill, 1994; Flick, 2000).

Clearly, knowledge about ethnic culture and pain has begun to take form, but more investigations are needed to address other relevant questions. For example, how might a pain sufferer’s cultural values inform their help-seeking behaviour? Or, how do certain ethnic groups understand chronic musculoskeletal pain? And since correlational and predictive studies typically account for only partial variance, what are the other factors that contribute to the picture of pain coping? Indeed, the list of relevant questions is endless, and this line of inquiry is currently at its infancy. Studies that provide content information, such as the experience and preferences in pain management among a specific cultural group, would add invaluable information to this growing but scarce body of literature.

**Approaches to Understanding Pain and Culture**

The primary goal of the current study is to understand the influence of culture in chronic pain management by exploring this process within a specific cultural group. In the current section, I discuss the ways in which other scholars have investigated cultural influences in health
and pain management. By reviewing and critiquing the methodologies used in existing studies, I aim to show my rationale for the current study’s design.

**How Does Culture Influence Pain? Two Relevant Theoretical Frameworks**

Previous sections of this chapter have described ethnic cultural differences in pain experiences and coping. But what are the mechanisms underlying these cultural differences? A theoretical framework explaining how culture influences pain experience and management would provide a much-needed roadmap to guide investigations in this area. Unfortunately, to date, no theoretical framework is available in the current literature that specifically explains how ethnic culture influences pain management. Within the broader literature on health, however, two frameworks appear to provide some understanding about how culture could be relevant in pain management. The current section describes two theoretical frameworks that explain how ethnic culture informs a person’s unique and idiographic approach to managing pain.

**Common Sense Model of Self-Regulation.** One established framework for understanding cultural influences in illness management is Leventhal and colleagues’ common-sense model of self-regulation (Leventhal et al., 1984, 2003). This model had originated from research on stress and health management within the area of cognitive psychology (Leventhal & Everhart, 1979; Pennebaker, 1982). Although it pertains to self-management of illnesses in general rather than musculoskeletal pain specifically, it has informed the design of the current study, and is therefore reviewed here.

According to Leventhal’s theory, people cope with symptoms, such as chronic pain, in a manner that makes sense to them by drawing from their own knowledge and beliefs. Their knowledge and beliefs about these symptoms are then shaped and modified with new information they learn about the symptoms (Leventhal et al., 1998). The theory suggests that
each person has an implicit assumption about a symptom, including what caused it, what its consequences are, and how to cope with it (Leventhal et al., 2003; Moss-Morris & Wrapson, 2003; Schiaffino & Cea, 1995). Being social learners, people develop their illness beliefs over time through interacting with their social environment (Leventhal et al., 2003). For example, individuals in the Caribbean are likely to interpret a syndrome of nausea, diarrhea, irritability, and anxiety as stemming from inappropriate eye contact committed by the symptoms sufferer, an interpretation that is guided by cultural beliefs in that region (Baumann, 2003). Through social learning, individuals develop their own common sense about a health condition by initially experiencing the symptom, appraising it as threatening, and trying to identify the nature, seriousness, cause, and possible consequence of the symptom (Leventhal et al., 2003).

Although culture is not an explicit focus, it is embedded in the model’s explanation of how individuals vary in their illness schemas according to their sociocultural background. For example, the model asserts that people’s idiographic understanding about a set of symptoms, be it heart palpitations or chest pain, is influenced by “culturally-shared notions concerning diseases” (Leventhal et al., 1998, p. 719). This theory claims that individuals of different places in the world take on different understandings of certain symptoms.

**Social Constructionist Framework.** While the common sense model states the idea that tacit understandings about an illness originate from one’s social context, the social constructionist framework (Berger & Luckmann, 1966; Blumer, 1969; Geertz, 1973) explains the process in which this occurs. It claims that people construct meanings about health through interacting with each other, and the meanings they construct contribute to societal norms (Boesch, 1991). These norms, in turn, shape people’s interactions, beliefs, and behaviours (Boesch, 1991). This cyclical and mutual influence between people and the social context is how cultural beliefs,
such as understandings about chronic pain, are constructed and changed (Berger & Luckmann, 1966). An example to illustrate this would be Canadians’ tendency to sneeze onto their arm sleeve. This practice likely emerged from individuals who believed that sneezing into other areas, such as into mid-air or into one’s hands, is unsanitary. As they communicate and demonstrate this meaningful act to others, they are adding to and constructing social meanings of health. As people engage in socially meaningful acts, whether with or without awareness, they are contributing to and reinforcing values about health in their local culture (Young et al., 2016).

The concept and meanings of chronic musculoskeletal pain, like all human phenomena, are brought to bear through these social interactions (Best, 2007; Sparkes & Smith, 2008) and become a part of people’s social reality in an implicit, taken-for-granted manner. The constructed social meanings related to chronic musculoskeletal pain, including moral values about how to best manage it, in turn, inform people’s experiences and behaviours (Borkan et al., 1995; Eccleston et al., 1997). Because meanings are constructed by interactions with the local social context (Holland & Quinn, 1987), they likely vary according to geographical regions. Supporting this assertion is the finding that language representations of pain differ among people of different contexts. For example, in a qualitative analysis of Thai and Japanese, Fabrega and Tyma (1976) found unique metaphoric terms in each language, such as twisting in Thai and having pain in the heart in Japanese, indicating culturally unique ways of thinking about pain. Moreover, social meanings change as the environment changes and people engage in different actions in response. For example, as mentioned above, the medical name for pain as a mental disorder has changed over the years (American Psychiatric Association, 1968, 2000, 2013) as existing ideas within the scientific community were refuted and new ideas were embraced.
In summary, two frameworks that inform scholars’ understanding of how culture influences pain management—Leventhal’s (2003) common sense model of self-regulation and the social constructionist framework—are delineated in the current section. While the common sense model of self-regulation (Leventhal et al., 2003) is a discrete model constructed by a single group of researchers, the social constructionist framework is a philosophical stance that is adopted by numerous scholars of social science. Both frameworks, through differing in theoretical perspectives, suggest that the manner in which a person responds to chronic musculoskeletal pain is informed by ideas, knowledge, and values inherent in their society. They are general frameworks that show how a cultural process of health management might unfold, rather than context-specific information about the process of a given cultural group. Such content-related knowledge, however, can be provided by studies that focus on a specific cultural group, such as the current investigation.

**How is Culture Studied in Pain Research? A Methodological Critique**

Within the available cultural studies in the pain literature, many of which are reviewed in the sections above, how has culture been defined and studied? The current section reviews two of the most common methodological approaches to understanding culture and pain—quantitative cross-cultural comparison studies and qualitative studies of pain within a particular cultural group. It first provides an overview of how culture is defined, followed by a critical discussion of how it is researched.

**The Many Definitions of “Culture.”** Culture is defined in different ways by scholars depending on their ontological and epistemological perspectives (Hatala, 2012; Ratner & Hui, 2003; Wuthnow et al., 1984). Although there is widespread interest in studying culture across disciplines, there is no unified consensus about how it ought to be operationalized (Hatala, 2012;
Schollan-Koliopoulos et al., 2012). Scholars with an objectivist view of the world regard culture as a set of institutions, values, traditions, language and daily practices that have been passed on through tradition and social learning (Leventhal et al., 2003; Oyserman & Lee, 2007). Researchers from this perspective take on a stance, whether explicitly or implicitly, that culture is a set of traits, behaviours, and ideas that are generally static and observable, albeit complex (Hatala, 2012). These traits, behaviours, and ideas can be measured for the purpose of research, and that given the right instrument, can be measured with high accuracy and completeness (Matsumoto & van de Vijver, 2012; Moon & Blackman, 2014). Research efforts are aimed towards identifying universal rules and laws in order to compare and understand different cultures (Berry, 2009; Matsumoto & van de Vijver, 2012).

Scholars with a relativist perspective of the world, on the other hand, see social reality as interpreted, constructed, and not necessarily existing outside of the perceiver, and therefore impossible to measure, no matter how rigorously created the instruments are (Moon & Blackman, 2014). The concept of chronic pain, for example, is regarded as being a part of culture, or a context-dependent social reality that is constructed and interpreted (Best, 2007), rather than a universal entity that exists in its own right. Researchers with this worldview regard culture and psychological processes as inextricably tied and that separating them into discrete variables reduces them into a less meaningful form (Giordano et al., 2009; Ratner, 1999). Rather than being a set of discrete and stable characteristics, concepts and behaviours, culture is ubiquitous and intangible. Scholars have defined culture as a web of meaning that is spun by humans (Geertz, 1973), as “an aspect of social reality” that can be studied through analyzing patterns within it (Wuthnow et al., 1984, p. 259), and a “field of action,” or a context in which meanings
are constructed (Boesch, 1991, p. 30). To these scholars, culture can be understood through analysis and interpretations of patterns and actions within a social context.

When compared side by side, the objectivist interpretation is more definitive and orderly than the relativist interpretation of culture. The latter, however, although more abstract and varied in its definition of culture, appears to be more representative of the complex, dynamic, and plural nature of reality.

**Researching Culture: The Quantitative-Deductive Approach.** The plurality of definitions of culture within the health literature has led to the development of diverse methodological approaches in studying culture. Scholars in positivist traditions, which primarily reside in fields of medicine, clinical psychology, and experimental social sciences, tend to conduct cross-cultural studies using a quantitative and deductive approach. In this approach, ethnic groups differences on social phenomena are hypothesized and tested using quantitative measures (Coreil & Marshall, 1982; Marques et al., 2013; Moore & Brødsgaard, 1999). Studies using this method tend to operationalize culture with discrete characteristics, such as ethnic group affiliation (e.g., McCracken et al., 2001) and place of birth (e.g., Hsieh et al., 2010). In these studies, a person’s country of origin or race is believed to indicate a specific cultural background with unique social meanings, preferences, and tendencies regarding health (Kirmayer, 2012). For example, a person who is South Asian is assumed to hold values, norms, perceptions and beliefs about pain that are consistent with those from regions within South Asia (Watson et al., 2005). The goal of research is to measure these values, norms, and beliefs within ethnic groups through the use of psychometrically validated instruments (Matsumoto & van de Vijver, 2012).
In the quantitative-deductive approach, an individual’s cultural background is often treated as an independent or predictor variable, while other social variables of interest, such as help-seeking, are conceptualized as dependent or outcome variables (Matsumoto & van de Vijver, 2012). These studies compare health-related outcomes between two or more ethnic cultural groups (for example, see Bonn & Tafarodi, 2013; Jun & Oh, 2013; Rees et al., 2010) using quantitative measures, and the effect of ethnic culture on social variables is then investigated through statistical procedures.

Quantitative-deductive approaches to research comprise a predominant portion of the musculoskeletal pain and culture literature. In these studies, ethnicity is regarded as a heuristic way of representing an individual’s cultural background (Johnson, 1998). In these investigations, two or more ethnic cultures (e.g., European and South Asian) are compared on their pain experiences and other social factors of interest (Watson et al., 2005). In order to identify the influence of ethnic culture on pain, researchers often would measure and control for the effects of confounding variables (e.g., socioeconomic status) and isolate the effect that ethnicity has on outcome variables, be they scores on a pain attitudes questionnaire or behavioural responses to lab-induced pain (Matsumoto & van de Vijver, 2012).

The quantitative and deductive manner of studying ethnic culture has important utility. Specifically, the tangible measuring of culture allows for comparative analyses and the testing of hypotheses through inferential statistics (Matsumoto & van de Vijver, 2012). As well, the use of well-validated measures of social variables—namely, ones that have construct validity, internal reliability, and stability that meet strict standards of the scientific community—gives strong credibility to the data. With rigorously conducted quantitative cross-cultural studies, scholars are able to draw conclusions about risk factors, protective factors, and etiology of illnesses and
health conditions that are specific to certain ethnic groups (Canino et al., 1997). In addition, because outcomes of quantitative studies consist of statistical data, they are typically reported in a concrete, circumscribed manner, such as the statement, “Chinese university-aged students displayed lower pain tolerance and reported greater SFMPQ-Affective compared to their European Canadian counterparts” (Hsieh et al., 2010, p. 1193). Such a succinct presentation makes the data particularly accessible for clinical use, such as in program evaluation. For example, the finding that some cultural groups report a more external locus of control for their pain (Bates & Rankin-Hill, 1994) is a straightforward piece of information that can be easily applied in the design of psychosocial interventions for these cultural groups.

A major drawback to statistical method of cross-cultural studies is that they necessarily reduce social reality into concrete variables in order to facilitate quantitative analysis (Eckensberger, 1996), which results in data that obscure culture. By reducing culture into ethnic membership, for example, researchers risk over-simplifying the culture under study (Ponterotto, 2008; Ratner, 1999; Waldram, 2006). Studies that compare racial or ethnic groups also make the assumption that different ethnic groups are culturally more distinct between each other than they are within themselves, which may not necessarily be the case (Kirmayer, 2012). Rather, two persons belonging to different ethnic groups could be more similar to each other (e.g., on educational opportunities, political views, social experiences) than they are with members of their own ethnic group. In this sense, studies that use ethnicity as a “proxy for culture” (Scollan-Koliopoulos et al., 2012, p. 488) lack construct validity. In addition, by looking only at group differences on discrete variables such as catastrophizing scores, the researcher inevitably discards rich information about what makes the groups different (Ratner & Hui, 2003). A finding that Chinese Canadians score higher on pain catastrophizing than European Canadians
(Hsieh et al., 2010), for example, does not provide information such as how they differ, why they differ, or what catastrophizing means to them. As acknowledged by quantitative cross-cultural researchers (e.g., Edwards et al., 2005; Fillingim et al., 2002; Hsieh et al., 2010; Watson et al., 2005), findings from quantitative studies uncover trends that warrant further investigation. In this sense, the usefulness of findings from quantitative cross-cultural studies are somewhat restricted—they provide a decontextualized, simplified finding that carries limited social meaning about the cultures they are supposedly studying.

The deductive approach of investigating a culture is also rendered less ideal by the fact that hypotheses are designed based on the “theoretical bias” of the researchers, rather than on observations and data gathered directly from the field (Matsumoto & van de Vijver, 2012, p. 91). In trying to prove or disprove theories, positivist researchers compare cultural groups based on factors that they, the authors of the study, deem to be important, rather than factors that the cultural groups themselves believe are important (Alasuutari, 1995; Matsumoto & van de Vijver, 2012). These studies produce data that are filtered by the researchers’ theories, and therefore may be more informative about the researchers’ social reality than that of the participants. By taking a positivist perspective about the social world, deductive research makes an assumption that the constructs are part of an external, objective reality, and is therefore the truth for all individuals (Moon & Blackman, 2014). It does not take into account the possibility that social reality may be subjective, interpreted, and constructed, and therefore different between the researcher and participants. Moreover, comparing researcher-determined social variables across cultural groups raises issues of validity of the results because the same construct may have different meanings for different cultural groups (Kleinman, 1980). Despite efforts to create culturally equivalent versions of measurement tools (e.g., Alnahhal & May, 2012; Ning et al.,
2008), concepts such as pain catastrophizing likely carry very different meanings for one group compared to another. To put in a different way, cross-cultural studies run the risk of comparing apples with oranges while generating conclusions as if they are the same fruit.

**Researching Culture: The Qualitative-inductive Approach.** Researchers of other disciplines, such as anthropology (Froerer, 2007; Kamat, 2009), counselling psychology (Marshall et al., 2011; Young et al., 2001), and sociology (Flick, 2000), see culture as a context or an aspect of social reality that cannot be separated into discrete parts, and therefore prefer to access culture in a more holistic manner (Waldram, 2006). Anthropologists, for example, see culture as a shared set of meanings that are constructed through social interactions within a shared geographical, social, and linguistic environment (Kleinman, 1980). Researchers from this perspective gain knowledge about the social world primarily through gathering observations and interview data (Brewer, 2000). As much as possible, data collection occurs in the participants’ natural setting and is directed at least partly by the participants (e.g., interviews are unstructured or semi-structured). Data that are regarded as trustworthy typically take the form of highly contextualized and detailed description of what is happening in a social world (Geertz, 1973; Kearney, 2001). One of the main goals of qualitative research is to generate or construct rich insights about the social world from the perspective of the participants (Ponterotto, 2008).

The qualitative-inductive approach to studying culture is exemplified by ethnography studies by medical anthropologists. For example, to understand social meanings about health among Tanzanians, Kamat (2009) interviewed and observed at length Tanzanian villagers as they negotiated the use of malaria vaccines provided by health workers. Rather than aiming to isolate variables of interest, cultural processes were captured holistically through interviews and reported in a narrative form with detailed descriptions of the research setting.
The major advantage of social constructionist’ qualitative approaches to studying culture is that they tend to gather data that are contextualized within the social world, such as field observations and unstructured interviews, the direction of which is largely determined by what the participants report (Flick, 2014). The resulting data is a set of themes and patterns about a social phenomenon that is built upon words that directly came from the participants (Kleinman, 1980). An example is Rogers and Allison’s (2004) study, in which researchers asked Indo-Americans and African-Caribbeans open-ended questions about their musculoskeletal pain experience. Through analyses of the interview data, the authors found themes that are meaningful to the cultural group under study, such as the idea that pain is a sign of fragility and weakness. These themes were constructed in an inductive manner, without any pre-existing hypotheses and assumptions about what they may be, which allowed for an ethical investigation on a culture that was relatively unknown to the researcher (Ponterotto, 2013). As well, data that remain embedded in their context (e.g., narrative descriptions about one’s experience of help-seeking) are more meaningful than similar information from decontextualized data seen in quantitative studies (e.g., the statistical association between a social support measure and anxiety level). Some scholars see qualitative cultural studies as a necessary first step of understanding cultural variations about a social phenomenon. As Boesch (1996) advocates, before meaningful cross-cultural comparisons can be made, a rich and in-depth understanding about each culture first needs to be established.

Within the current body of qualitative studies on culture and pain, there is variability in the complexity and level of analysis, and therefore usefulness, of the data. Studies with high utility typically are rigorously conducted, have a strong analytical component, and provide data that are contextualized with thick description, which increases credibility of their data (Tracy,
Characteristics of a rigorously conducted qualitative investigation include triangulation and striving for saturation during the data collection phase (Mathison, 1988; Morse, 1995). In their study comparing the experiences of chronic pain in patients of the U.S. and India, Kodiath and Kodiath, (1992) utilized triangulation by including supplemental data from physicians, chart notes, friends, and family, which enhanced the trustworthiness of their results. Regarding saturation, an example was evident in a study of circumcision and birthing pain among Somali women living in Norway, in which the investigators conducted further interviewing and recruited additional participants to fully explore the themes they were noticing (Vangen et al., 2004). Their efforts enhance the likelihood that they have accessed the phenomenon in a fulsome manner from the perspective of the participants. In contrast, a study by Baarnhielm (2012) exploring a single case of a Syrian woman with chronic pain may have less utility for practitioners due to the sparseness and scarcity of data from which themes were generated.

Aside from the large variability in data quality, there are other drawbacks to social constructionist approaches to studying pain and culture. One potential issue is that findings from qualitative studies may be more cumbersome to access compared to quantitative research findings. Themes and conclusions drawn from rigorously conducted qualitative investigations often take the form of rich and contextualized details in lengthy narratives, which may require more time to take in for the consumer. This is especially the case for large-scale ethnography studies, such as Kleinman’s (1980) work on the Chinese healthcare system for mental illness. It is possible that qualitative approaches to investigating culture and pain would pose greater barrier for knowledge transfer for practitioners who are more familiar with positivist and quantitative traditions of research (Sandelowski, 1997), such as those in biomedical fields (Hatala, 2012).
Social constructionist research also generates results that are more difficult to apply across situations. Highly contextualized qualitative studies are tied to a certain context and their results are transferrable mainly to contexts that are similar. Applying their results to other contexts, although a reasonable use of qualitative data, is not a straightforward endeavour as it requires familiarity with qualitative research methods (Sandelowski, 1997). This is in contrast to quantitative studies, the findings from which can be readily applied to the general population without the need for much questioning because they are meant to be context-free.

Finally, the social constructionist approach may be regarded as less useful to scholars who take on an objectivist world view about pain. To researchers who hail from a positivist position, the relativist and interpretive manner of understanding social reality does little to enhance knowledge about universal processes (Berry, 2009). As well, to assume that all social reality is constructed through human interactions and exist only through the individual’ perception may downplay the fact that pain is still a biomedical phenomenon that entails observable biological mechanisms (Best, 2007). Clearly, there are limitations to qualitative-inductive approaches to researching culture and pain. To counteract the potential shortcomings of qualitative and quantitative investigations, some scholars argue for a combination of both approaches when conducting cultural research (Berry, 2009; Schrauf, 2018).

In summary, the ways in which culture is understood, defined, and studied vary widely across disciplines and researchers. The positivist and social constructionist perspectives have contrasting ways of conceptualizing culture. Methods that generally correspond to these perspectives (i.e., quantitative-deductive and qualitative-inductive, respectively) come with their own set of strengths and shortcomings. The choice of whether to use a positivist, quantitative cross-cultural design or a social constructionist qualitative and inductive approach reflects the
researcher’s philosophical view of the world, and therefore cannot be judged as correct or otherwise. From a pragmatic standpoint, investigations that offer a rich cultural analysis of pain and produce findings that can be distilled into an accessible, concise form are likely to be a useful source of information for practitioners and a valuable methodological example for health researchers.

**Pain Management Among Chinese Immigrants: A Worthwhile Investigation**

Given the amount of time and effort required to conduct a rigorous cultural study on pain, researchers need to be judicious about the topic towards which to devote such energy. From the perspective of pain management research and development, studies that lead to knowledge about relevant populations that are scarcely researched are especially valuable.

Canada is a country in which the topic of ethnic cultural influences on health is highly relevant, due to the fact that it is the home of over 250 ethnic groups and has an immigrant population that comprises over one-fifth of the country’s general population (Statistics Canada, 2011). Immigrants participate in the country’s economy as well as social services such as the healthcare system. Immigrants from China, in particular, are an ethnic cultural group that is under-represented in the musculoskeletal pain literature, despite their substantial level of migration into Western countries in the past several decades. In Canada, for example, immigrants from the People’s Republic of China have been one of the largest ethno-cultural groups in recent years (Government of Canada, 2014). Given the large representation of mainland Chinese in Canada, knowledge about this population would likely enhance culturally informed practice for a substantial portion of healthcare consumers in this country.

Current findings suggest that Chinese individuals have a lowered pain tolerance and a greater tendency to catastrophize about pain (Hsieh et al., 2010), yet poorer access to healthcare
services in Canada due to language and cultural barriers (Lai & Chappell, 2007). Research also indicates that Chinese patients understand and cope with chronic musculoskeletal pain in a manner that diverges from Western medicinal beliefs (Tung & Li, 2015; Xiong et al., 2011). For example, an exploratory factor analysis suggests that chronic low back pain is conceptualized by traditional Chinese medicine as consisting of blood stagnation, coldness and dampness, kidney deficiency, and inflammation related to heat and warmth (Xiong et al., 2011). These concepts are vastly different from Western medical concepts of muscle tension and neural pain signals. Anthropological studies have also shown that Chinese traditional health beliefs are uniquely characterized by principles of balance and theories about elements of metal, earth, water, fire, and wood (Kleinman, 1980), concepts that appear foreign to Western science. In an effort to measure pain experiences in a manner that is culturally appropriate for Chinese patients, researchers (e.g., Chow & Chan, 2005; Ning et al., 2008; Wong et al., 2011) have developed pain questionnaires that are psychometrically validated with Chinese populations. Laboratory studies have also compared pain responses between individuals of Chinese ethnicity and those of European ethnicity in a controlled environment (Hsieh et al., 2010, 2011). These studies identified social variables that may be pertinent to pain coping among the Chinese, such as pain control, disability, and pain catastrophizing. No studies to date, however, have aimed to develop a holistic and rich understanding of chronic musculoskeletal (MSK) pain experience and management among individuals of Chinese culture.

A study that generates insight about how Chinese immigrants face chronic MSK pain is expected to inform practice for nurses, general and specialist physicians, physiotherapists, rehabilitation specialists, occupational therapists, counsellors, and case managers for injured workers within the compensation and insurance systems (Germain, 1992; Lasch, 2000; Schultz,
Chlebak, et al., 2016). Given the limited amount of literature about the phenomenon at hand, an approach that generates themes and explanatory processes is needed as a starting point for further hypothesis examination (Strickland, 1999). Moreover, a study that provides an analysis of the phenomenon at hand, as opposed to only a set of descriptions, is likely more useful for healthcare practitioners (Miller, 2010; Sandelowski & Barroso, 2003). The current study aims to incorporate these characteristics into its design by employing a qualitative method that allows for the gathering of rich details about the pain management experiences of a cultural group and presenting their experiences in a distilled, condensed, and analyzed form.

Summary

Research on chronic musculoskeletal pain in recent decades has moved from focusing solely on biomedical processes to placing much emphasis on psychosocial processes. As a result of this paradigm shift, psychosocial theories for understanding chronic pain have been developed, with the most prominent theory being the biopsychosocial model of pain (Gatchel et al., 2007). This model has been supported by numerous findings about psychological, social, and cultural aspects of pain, such as personality traits, social support, and ethnic differences, respectively. In turn, the model has inspired further investigations that have generated findings that are useful in clinical settings and policy development. An aspect of the biopsychosocial model that warrants closer attention is the cultural aspect of pain, particularly chronic musculoskeletal pain, the sequelae of which is known to be impacted by sociocultural factors. Fortunately, scholarly interest and efforts focusing on culture and chronic musculoskeletal pain are becoming increasingly well-represented.

In the current pain literature, coherent theoretical frameworks that delineate the ways in which culture impacts pain are not presently available. In the broader literature of culture and
health, however, two examples of these theoretical frameworks—the common-sense model of self-regulation by Leventhal et al. (2003), and the social constructionist perspective of pain and health—can be found. They each provide a much needed explanation about the manner in which ethnic culture impacts health management in general, and might also illuminate the process of how ethnic culture may influence chronic musculoskeletal pain management. Specifically, Leventhal et al.’s (2003) model could explain how an ethnic group’s common-sense about chronic pain informs their pain management behaviours, while the social constructionist framework offers potential insights about how cultural norms and values about chronic pain are constructed, practiced, and shifted within an ethnic cultural group. To date, no studies in the pain literature have taken advantage of both of these frameworks to understand how ethnic culture influences chronic musculoskeletal pain management.

Within the small but growing collection of cultural studies on pain, different approaches to defining and studying culture are apparent, and can be broadly categorized into either deductive and quantitative or inductive and qualitative. Each of these approaches contains strengths as well as methodological shortcomings. Specifically, quantitative, deductive, cross-cultural studies provide concise data that can be readily applied in practice and contribute to knowledge about universal processes, but is unable to capture culture in its complex and dynamic form that is reflective of social reality. Qualitative, inductive and social constructionist cultural studies, on the other hand, offer rich and contextualized data that are much more representative of the complexity of culture, but vary widely in quality and tend to generate data that are more difficult to apply across situations and less accessible in the biomedical fields. A methodological approach that has the capacity to capture rich qualitative data on an ethnic
culture while providing interpretive results in a concise, distilled, and analyzed form would be a useful contribution to the field of chronic musculoskeletal pain management.

One ethnic cultural group that warrants further investigation is Chinese immigrants in Canada, due to their large presence in the country and participation in the local healthcare system. An understanding about how their culture informs their manner of managing chronic musculoskeletal pain would provide one piece of an important puzzle about the influence of culture on pain management. The current study aims to contribute to this knowledge gap by providing an investigation on the cultural values, preferences and tendencies in managing chronic musculoskeletal pain among immigrants of mainland China living in Vancouver, Canada. It is expected that a study using a qualitative, inductive approach that focuses on generating a concisely presented analysis about this particular cultural group would benefit culturally informed practice among healthcare providers and other stakeholders involved in pain-related conditions.
Chapter 3: Methodology

The goal of the current study is to understand how immigrants from China (ICs) living in Canada conceptualize and manage chronic musculoskeletal pain. Within this broad topic, a particular focus is placed on the values, beliefs, preferences, and assumptions underlying pain management. The current chapter explains my choice of research method and my execution of this method. It also discusses ethical considerations in the current study as well as the criteria that are used to ensure quality in the study.

Statement of Research Focus

A large and increasing group of first-generation immigrants from China (ICs) currently reside in Vancouver, British Columbia, Canada, and like all Canadian residents, participate in the local healthcare system (Lai et al., 2007; Stevenson et al., 2018). ICs, having been socialized in China earlier in their lives, may hold very different beliefs and values about health and pain management as compared to groups who have been living in Canada for generations. It is believed that an in-depth and holistic understanding—namely, one that considers the fuller picture of what is happening as opposed to one that attends to discrete and singular concepts—about chronic musculoskeletal pain management from the perspective of ICs would inform practitioners about serving this population and further scientific knowledge about the impact of culture in pain management. The current research aims to address the following questions: How do immigrants from China understand their chronic musculoskeletal pain? What do they do to manage their pain, and why?

Pain management is a term that originates from Western scientific literature and connotes actions done to relieve the experience of pain (Brennan et al., 2007; Davis, 1992; Gatchel et al., 2014). The current study does not assume that ICs or any other cultural group intentionally engages in actions to decrease pain. Indeed, in some contexts and with certain cultural groups, pain is often dismissed, ignored (Dean et al., 2011; Rogers & Allison, 2004), or regarded as natural and acceptable (Lin et al., 2013). The term, pain management, is used throughout the dissertation as that is how I conceptualize the action of facing chronic pain, whether it is an intentional, pain diminishing behaviour or a passive or stationary state of doing nothing intentional.
Ontological and Epistemological Position

In social research, the investigator’s assumptions about the world influence the procedures and methods undertaken to learn about the world (Pascale, 2011). Therefore, in order for a study to be judged as having methodological integrity, there needs to be consistency between the researcher’s philosophical stance and the methods chosen (Ponterotto, 2013). For this reason, an explanation of my own ontological and epistemological views is in order.

In regards to my beliefs about the nature of reality, or what “is,” I have considered two stances that are commonly identified among researchers. The first stance I considered is that of a realist, which entails the belief that there is a single reality outside of the observer, regardless of whether or not it is apprehended by an observer (Pascale, 2011). Thus, a coping style like pain catastrophizing is an entity, albeit intangible, which exists regardless of how it is labelled or perceived. In regards to knowledge acquisition, realists tend to endorse objectivism, or the idea that reality is measurable given the correct tool (Moon & Blackman, 2014). Thus, a gold standard for a measure of pain catastrophizing is one that has high validity and reliability.

In contrast, researchers holding a relativist position believe that reality exists only through a person experiencing it, and therefore many realities co-exist (Moon & Blackman, 2014; Pascale, 2011). It follows that relativists endorse social constructionism as an epistemological stance, which assumes that the social world is interpreted rather than measured, and that knowledge is constructed by our own imaginations and beliefs, rather than measured or observed (Moon & Blackman, 2014). Relativist-interpretivists may concede that the tangible world, such as the mass of a table or the angle of a tree branch, exists independently from the observer, but the social world, such as ideas of personality, chronic pain, or disability, exists only because we are perceiving it and ascribing meaning to it (Lincoln & Guba, 1985). It is important to note
that neither of these positions is more correct than the other. Rather, they are simply different philosophies that a scholar could be drawn to and have very different consequences in regards to the research methods.

My own philosophical stance regarding social reality aligns with that of relativism and interpretivism. I believe that concepts like culture, pain management, depression, and family are all social constructions, or borne out of human thought. Moreover, I believe that knowledge of the social world is constructed, rather than discovered. Therefore, my understanding about knowledge is that it is *constructed* by a process on which the researcher has direct influence, rather than passively discovered or *allowed* to emerge. Social reality, in my view, is not singular and objective, but multiple and subjective.

**Theoretical Frame of Culture: Symbolic Interactionism**

Charmaz (2006) recommends that researchers explicitly describe the theoretical frame that “integrates the narrative” of their study, in order to show readers how the study logically unfolds (p. 65). My theoretical frame of culture is informed by Blumer’s (1969) three tenets of symbolic interactionism. These tenets serve as the theoretical frame onto which I have constructed my study.

The first tenet states that humans act according to meanings ascribed to objects, and that these meanings are expressed through language and actions, among other symbols (Blumer, 1969; Boesch, 2001). In agreement with this logic and the idea that social “objects” are constructed, I see immigrants from China to be humans who have likely constructed meanings for their experiences of lengthy non-specific pain in their body (or “chronic musculoskeletal pain” in North American scientific literature). These meanings are expressed by their behaviours as well as the language they constructed to symbolize these meanings. Therefore, the meanings they
attribute to pain-related experiences can be accessed through an interpretation of their actions and words. For example, the two Chinese characters, 求醫, translated into English as “to request or to beg” and “medical,” respectively, may suggest a sense of deference when seeking help from a physician. Given that humans also act on their environment according to the meanings they have constructed (Boesch, 2001), it follows that those of Chinese heritage may deal with pain differently from those outside of their cultural group.

Blumer’s (1969) second tenet states that our meanings arise from social interactions. Immigrants from China, having been brought up in the same educational system within the same country, can be considered to have been socialized in a similar context. They also share a similar political and economic context and the same national identity (i.e., Chinese). In their daily lives, they are exposed to the same media outlets and popular literature. Those who had lived in China until at least age 16 years would have spent some of their adolescence, during which aspects of cultural identity such as morality and values are formed (Jensen, 2010), in the Chinese social context. As well, they share the social experiences of immigration, which entails interacting with the local government system, as well as navigating a new cultural environment after arrival. Therefore, the current study considers first generation immigrants from mainland China as a unique cultural group.

Finally, symbolic interactionism claims that social meanings are modified as individuals go through new experiences and environmental shifts (Blumer, 1969). As individuals emigrate from China to Canada, they actively change their social context, which inevitably leads to new social experiences. As they continue to interact with other individuals in Canadian society and access local media and services, their understandings, preferences, and actions regarding pain management would also likely to change. Therefore, the resulting data of the current study are
regarded to be a representation of the values, beliefs, preferences, and actions of individuals with both Chinese and Canadian influences. Moreover, because meanings change with shifts in social context, the data that result from the current research effort may not have the same relevance as time passes and society changes.

**Method Selection**

This section describes the method I have selected to conduct the current study, as well as my rationale for making such a choice.

**Choosing a qualitative approach**

Investigating culture in a manner that accounts for its richness and complexity is challenging, and research studies that use trait-based, deductive methods to access culture, such as questionnaires about beliefs and ethnic group membership, invariably fall short of achieving this goal (Wuthnow et al., 1984). Qualitative, inductive methods such as semi-structured interviewing, on the other hand, are more apt to capture the complexities of a culture (Ponterotto, 2013), and would likely address the methodological shortcomings in the pain literature. Qualitative researchers investigate culture by interviewing and observing participants in an exploratory manner and constructing themes from participants’ data, without the influence of any a priori assumptions (Flick, 2014). This open and exploratory approach encourages open-mindedness and sensitivity while analyzing the data, which is an ethical way of gaining understanding of a particular cultural group (Ponterotto, 2013). When conducted with adequate rigour, qualitative research provides new conceptual knowledge about a phenomenon (Tracy, 2010).

A qualitative method that allows for a solid investigation of a culture is grounded theory. Grounded theory forms understanding inductively using data that emerge and unfold in the field
(Charmaz, 2008). Its inductive nature allows one to openly receive unexpected findings in a relatively unknown area (Barnes, 1996; Charmaz, 2008). Given that little is currently known about the process of facing chronic musculoskeletal pain among Chinese immigrants, a method that allows one to proceed with tentativeness and openness would be ideal. I am also drawn to grounded theory because it guides analysis and interpretation of the data (Barnes, 1996), and allows the researcher to construct a theory about the phenomenon under study (Charmaz, 2006; Glaser & Strauss, 1967), instead of offering mainly in-depth narrative descriptions, such as what an ethnography study would provide (Charmaz, 2014). I believe that a theory about chronic pain management that is thoroughly grounded in the data can be quite useful, as it provides an explanation of an issue and is trustworthy and readily accessible to readers. Therefore, grounded theory is the chosen method for this research. Previous pain studies using this approach (e.g., Beaton et al., 2001; Stewart et al., 2012) have generated explanatory models of social processes that can be readily applied in practice. In keeping with my philosophical view about cultural research, the resultant theory is expected to be workable with observations in the field, modifiable should there be new and inconsistent knowledge, and relevant to practitioners’, scholars’ and the public’s interests (Charmaz, 2006; Glaser, 1978).

**Overview of Grounded Theory**

Grounded theory is a research methodology that was originally developed by Glaser and Strauss in the 1960s during their experiences in researching death and dying in hospitals (Kearney, 2007). They described this method in the book, *The Discovery of Grounded Theory*, in 1967. Barney Glaser’s training background resided in a quantitative, positivistic epistemology, while Anselm Strauss came from a background of pragmatism, in which participants are
assumed to play an agentic role in the creation of research data (Charmaz, 2000; Walker & Myrick, 2006). Together, they devised a qualitative research method for generating theory about human psychological and social processes (Charmaz, 2006). Part of the appeal of the grounded theory method is that it allows for the construction of rich qualitative data characterized by the interpretive traditions while outlining a rigorous and systematic method of analysis that is often seen in quantitative positivist research (Walker & Myrick, 2006).

The framework of grounded theory includes theoretical sampling, in which data is gathered for the purpose of theoretical development, and meticulous coding of the data for the purpose of generating conceptual categories (Glaser & Strauss, 1967; Strauss & Corbin, 1990). The procedures of collecting data, coding, and analyzing data are joint and iterative processes whereby data collection informs the coding and analysis and, in turn, the results of the data analyses inform further data collection (Charmaz, 2006). Data collection is strategically continued until the conceptual categories of interest are saturated, or fully explained, by the data (Glaser & Strauss, 1967). The product of this research method is a theory that is substantive, or “situated in one particular situational context” (Strauss & Corbin, 1990, p. 174).

In 1990, Strauss collaborated with Juliet Corbin to develop a guideline for coding data, in an effort to guide those who are less familiar with the method (Corbin, 1998). Their book, *Basics of Qualitative Research* (Strauss & Corbin, 1990) described a coding scheme that is different from those of Glaser and Strauss’s (1967) original version of grounded theory (Walker & Myrick, 2006). In the decades that followed the introduction of the Straussian method, there was heated debate between Glaser and Strauss about the correct way to generate conceptual categories (Walker & Myrick, 2006). Specifically, Strauss and Corbin's (1990) approach to coding the data was regarded by Glaser (1992) as overly deductive as it seems to force a
framework onto the data, rather than letting the concepts emerge on their own. Strauss and Corbin (1990), on the other hand, retorted with the notion that research data are always being imposed upon by the researcher’s viewpoint, and not just emerging on their own. Therefore, they argue, it is wiser to articulate a standard framework of concept generation that everyone can follow (Corbin, 1998; Strauss & Corbin, 1990). This scholarly disagreement resulted in two varying versions of grounded theory, one upheld by Glaser and the other by Strauss.

Recently, scholars have further adapted the method to fit with their philosophical views (Charmaz, 2000). It has been noted that *The Discovery of Grounded Theory* (Glaser & Strauss, 1967) was written with a largely realist and objectivist language, which renders the method difficult to understand for researchers who embrace a relativist ontological lens (Charmaz, 2000). Catherine Charmaz, in particular, described an interpretation of grounded theory from a social constructionist perspective (Charmaz, 2000, 2006; Charmaz & Mitchell, 2001). Social constructionism, as described earlier in Chapter 2, is a philosophical approach that regards knowledge and meaning as constructed through human interactions with each other and society (Berger & Luckmann, 1966; Blumer, 1969). It assumes that reality is subjective and multitudinous, that the investigator’s own perspective is inextricably involved in the research process, that knowledge about the world is co-created by the investigator and the participants, and that social meanings and everyday interactions are mutually shaped (Berger & Luckmann, 1966; Gergen & Gergen, 2008; Waldram, 2006). Unlike the traditional view that grounded theories are discovered, Charmaz’s (2006) writings emphasize that they are *constructed* via data collection and analysis. In *Constructing Grounded Theory*, she takes into consideration both the Glaser and Strauss (1967) and the Strauss and Corbin (1990) versions to generate another version that upholds social constructionist views. She emphasizes that data gathering, coding, and
analysis are all constructive processes that necessarily involve the researcher’s subjectivity (Charmaz, 2006). She suggested that grounded theory researchers acknowledge and incorporate their subjectivity in the data, rather than try in vain to eliminate it (Charmaz, 2006). From the standpoint of interpretivism and relativism, with which I align, Charmaz’s acknowledgement about the role of researcher subjectivity soundly reflects the complexity of social reality.

*Constructivist Grounded Theory*

As mentioned above, there have been three main camps of grounded theory – Glaserian (Glaser, 1978), Straussian (Strauss & Corbin, 1990), and Constructivist (Charmaz, 2000). Each of these types prescribes the same general method of deriving a substantive theory from data. Specifically, they all involve theoretical sampling, constant comparisons, movement from initial to advance coding, and writing and sorting of memos (Kenny & Fourie, 2015). The three approaches, however, differ in regards to coding strategy, use of the literature, and philosophical stance (Kenny & Fourie, 2015).

Among the three types of grounded theory, constructivist grounded theory is the best fit for my social constructionist position and research goal of understanding a culture. I believe that it is important to recognize that research data is a representation of a situation and context that change over time (Charmaz, 2008). As well, I agree with Charmaz’s (2006) notion that researcher subjectivity is unavoidable and ought to be acknowledged rather than eliminated. In her interpretation of grounded theory, data are seen as products of social interactions, and these interactions are shaped by the researcher’s own biases and background knowledge. I believe that my grounded theory of mainland Chinese immigrants’ management of chronic musculoskeletal pain is constructed based on my interactions with my participants and shaped by my professional and personal experience and knowledge about the field. Therefore, in order to conduct a
research study that has logical consistency between theory and method, I choose Charmaz’s (2006) constructivist grounded theory approach.

**Method Execution**

In grounded theory, the processes of sampling, coding, and analysis inform each other and are jointly conducted. When implemented correctly, the current grounded theory study should lead to the generation of a substantive theory that explains how immigrants from China manage chronic musculoskeletal pain. In constructivist grounded theory as described by Charmaz (2006), the resulting theory takes the form of a narrative consisting of major concepts, or categories that explains a phenomenon. The current section describes each component in a linear fashion, but it is important to note that in practice, they occur in a cyclical manner.

**Reflecting on Researcher’s Biases**

According to Charmaz (2006), the researcher influences many aspects of the data analysis. This includes how the research question is conceptualized, what gets noticed and observed in the field, and what comes across as interesting within an interview. In order to maintain transparency and rigour, it is paramount that the researcher sincerely reflects on aspects of the self, such as her past experiences, knowledge, and interests, as these aspects shape the final product of the study (Tracy, 2010). The researcher’s reflexivity contributes to trustworthiness and is considered to be an important marker of quality in qualitative research (Morrow, 2005). In an effort to be reflexive and transparent, I have thought about how my own background may influence the current study and have documented these reflections here.

In regards to my cultural background, I am a Chinese-Canadian and first-generation immigrant from Hong Kong. My first language is Cantonese, a common dialect in Southern regions of China and I had lived in a Cantonese-speaking household until my early 20s. I have
also learned to converse in Mandarin through socializing with Mandarin speakers, watching television shows, and taking a Mandarin course. The mass media to which I was exposed consisted largely of Cantonese shows produced in Hong Kong and to a lesser extent shows from mainland China and Taiwan. Some of my extended family members remain in Hong Kong and therefore I consider Hong Kong as a “second home.” Having immigrated to Canada for 30 years, I also have an abundance of experiences of living, growing, and attending school in Canada. I consider my cultural identity as predominantly Canadian.

Nevertheless, I share commonalities with my Chinese participants in regards to language and traditional Chinese views and feel quite “at home” in Chinese social settings. In order to avoid taking what my participants say for granted and to remain sensitive to the meanings my participants present, I endeavoured to be self-reflective throughout the process of data collection. Morrow (2005) suggests that researchers take the position of a “naïve inquirer” when they have familiarity with the culture they are trying to learn about, so that they can focus on representing the participants’, rather than the researchers’ own, realities (p. 254). I therefore employed this approach when interviewing participants of the current study.

In regards to professional experiences, I have read as part of my preparation for the current dissertation a large body of literature in the areas of musculoskeletal pain and rehabilitation, cognitive behavioural therapy and multidisciplinary treatments for pain, personality factors relevant for pain outcomes, barriers and facilitators of recovery from pain conditions, as well as Leventhal’s (2003) common sense model of self-regulation, which provides a framework for thinking about cultural influence on health (see Chapter 2 –Foundational Literature). I have taken part in the production of review articles that synthesize recent findings on risk factors for disability from pain conditions (see Schultz, Chlebak, & Law, 2016, and
Schultz, Law, & Cruikshank, 2016). Concepts that make up my current knowledge likely serve as sensitizing concepts for my data collection (Charmaz, 2014).

In regards to applied experience, I have provided counselling services for adult Chinese clients who had pain conditions and required psychological counselling. Prior to this experience, I had worked for two years in a hospital clinic in Toronto, Ontario, as an assessment clinician for adults who have sustained a workplace injury. I became interested in cultural considerations in pain presentation during my years of working with insurance claimants who were migrants from another country. I was tasked with providing an opinion on the reliability of an injured worker’s self-report of psychological distress, given the nature and magnitude of their injury. I found this task especially challenging when the client had come from a very different social context, as I was naïve about their cultural beliefs about pain. For example, when a South Asian client reports that she became depressed, suicidal, and hallucinatory following a shoulder strain, how would one know if her symptoms were “warranted” given her injury? My approach to this research study is motivated by an interest in this issue and a desire to contribute to the understanding of the complexity of pain and recovery when culture is considered. I expect that my desire to give voice to minority groups may influence my manner of approaching participants and analyzing the data in the current study. As well, my desire to contribute transferrable and useful knowledge to practitioners may also shape my priorities when constructing my theoretical framework.

As a means of ongoing reflexivity, I followed the advice of qualitative scholars (Charmaz, 2006; Morrow, 2005; Tracy, 2010) by exploring my personal values and motivations throughout the study using a researcher’s journal. The journal was kept from the time when the study was conceptualized in March 2016 to the completion of the written research report, in June 2020.
Aside from serving as a platform for my self-reflections, it also serves two purposes – increase transparency of my research process and spark ideas for data analysis. See Appendix A for a sample journal entry.

**Initial Recruitment**

In the grounded theory method, sampling entails two phases – initial sampling and theoretical sampling (Charmaz, 2006). Initial sampling allows the researcher to acquaint themselves to the topic through interviewing individuals in the field with characteristics pertinent to the topic. It provides a “point of departure” for the researcher in learning about the topic (Charmaz, 2006, p. 100). After the analyses of data from initial sampling, theoretical sampling occurs for the purpose of elaborating on the concepts that are constructed from the analysis (Charmaz, 2014). It involves recruiting participants with characteristics that would provide further information about the concepts the researcher tries to elaborate. See Table 1 for a full list of participants, both in the initial and theoretical sampling phases.

For the initial sample, I recruited Chinese adults with chronic musculoskeletal pain living in the Metro Vancouver region through placing advertising pamphlets in family physician offices, public libraries, and community centres; See Appendix B for a copy of the advertising pamphlets). As well, I conducted recruitment presentations at pain clinics and rehabilitation centres. In addition, I placed advertisements on Internet sites known to be frequented by the Chinese community (i.e., www.vansky.com and www.vanpeople.com).

It was important to me to recruit first-generation immigrants who had lived in China until at least the end of their childhood, as they would need to have had the opportunity to be socialized in China during their early formative years. Consistent with the view that 16 is an age that entails sufficient maturity for certain life decisions (Dauda et al., 2010), I assumed that 16
Table 1

Identification Number, Pseudonym, and Demographic and Pain Characteristics of Participants for Each Recruitment Context

<table>
<thead>
<tr>
<th>ID #</th>
<th>Pseudonym</th>
<th>Gender</th>
<th>Age</th>
<th>Pain quality as described by participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Janet</td>
<td>Female</td>
<td>53</td>
<td>Daily low back pain, intensity 4-5 /10. Shoulder pain flare up with overuse, 7-8/10</td>
</tr>
<tr>
<td>02</td>
<td>Hua</td>
<td>Female</td>
<td>47</td>
<td>Constant low back and leg pain with intensity of 3-7/10; Sudden onset during labour job</td>
</tr>
<tr>
<td>03</td>
<td>Ming</td>
<td>Female</td>
<td>41</td>
<td>Mid Back, shoulder, knee pain with moderate intensity, occurring 3 to 4 days of the week</td>
</tr>
<tr>
<td>04</td>
<td>Liang*</td>
<td>Female</td>
<td>43</td>
<td>Constant widespread pain with intensity of 6-7/10; several areas of the body</td>
</tr>
<tr>
<td>05</td>
<td>Grace*</td>
<td>Female</td>
<td>45</td>
<td>Constant pain for 20 years; Intensity of 3-5/10, worst at of the day. Areas: neck, shoulder, back</td>
</tr>
<tr>
<td>06</td>
<td>Shao</td>
<td>Female</td>
<td>64</td>
<td>Daily knee pain that increases with movement</td>
</tr>
<tr>
<td>07</td>
<td>John</td>
<td>Male</td>
<td>55</td>
<td>Shoulder and arm pain after a slip and fall workplace injury 4 months ago</td>
</tr>
<tr>
<td>08</td>
<td>Jane</td>
<td>Female</td>
<td>49</td>
<td>Daily pain in neck and knees; Intensity of 7 out of 10 and worsens with fatigue</td>
</tr>
<tr>
<td>09</td>
<td>Alice*</td>
<td>Female</td>
<td>50</td>
<td>Shoulder and low back pain; Arthritic pain in hip area; daily and intense pain for past 2 years</td>
</tr>
<tr>
<td>10</td>
<td>Ruby</td>
<td>Female</td>
<td>45</td>
<td>Daily sharp pelvic nerve pain, originally began 12 years ago following car accident</td>
</tr>
<tr>
<td>11</td>
<td>Yue</td>
<td>Female</td>
<td>70</td>
<td>Daily pain in upper, to lower back including glutes; worsens with activity</td>
</tr>
</tbody>
</table>

Recruited based on general inclusion criteria:

12   | Jack      | Male   | 47  | Daily pain with intensity of 5-7 /10 in low back, neck, arm, and calf. |
13   | Billy     | Male   | 56  | Daily back pain for several years after MVA with intensity of 7-8 /10 |
### Table 1 (continued)

*Identification Number, Pseudonym, and Demographic and Pain Characteristics of Participants for Each Recruitment Context*

<table>
<thead>
<tr>
<th>ID #</th>
<th>Pseudonym</th>
<th>Gender</th>
<th>Age</th>
<th>Pain quality as described by participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Bob</td>
<td>Male</td>
<td>41</td>
<td>Weekly headaches that seem to be triggered by stress.</td>
</tr>
<tr>
<td>15</td>
<td>Donald*</td>
<td>Male</td>
<td>45</td>
<td>Daily back pain; Pain 3-4 days /week in neck, shoulder, knee; Intensity: 7-8 /10</td>
</tr>
<tr>
<td>16</td>
<td>Li</td>
<td>Male</td>
<td>41</td>
<td>Daily wrist pain, intensity: 4-5/10; Shoulder pain, and knee 3-4 days/week; Knee when pressed</td>
</tr>
<tr>
<td>17</td>
<td>Feng</td>
<td>Male</td>
<td>45</td>
<td>Daily low back pain for past 6 years, intensity ranges 3-6 /10</td>
</tr>
<tr>
<td>18</td>
<td>Lin</td>
<td>Male</td>
<td>61</td>
<td>Daily low and mid back for 6 years from heavy lifting; Need to wear back brace for sleeping</td>
</tr>
<tr>
<td>19</td>
<td>Rong</td>
<td>Male</td>
<td>50</td>
<td>Shoulder pain for 3 months, knee pain for 1 month due to bone spurs, mildly bothersome</td>
</tr>
</tbody>
</table>

Recruited based on the criterion, having pain that needs managing

| 20   | Janice    | Female | 55  | Daily pain in jaw, neck, shoulder, low back, hip for 10 years after MVA; intensity: 6-9 /10 |
| 21   | Mandy     | Female | 50  | Daily hip pain for 4 years, sudden onset; Interferes with sitting and sleep |

Recruited based on the criterion, having pain that requires active treatment

| 22   | Shan      | Female | 55  | Pain in neck (triggers headaches), upper back & shoulders; Whiplash with head trauma |
| 23   | Connie    | Female | 50  | Daily pain in arm for 4 years after MVA; pain is highly bothersome |
| 24   | Emily     | Female | 55  | Pain and stiffness in hands that worsen with cold temperatures |

*Note:* MVA = Motor Vehicle Accident; * = Participated in a follow-up interview for member reflections
years was an appropriate minimum age before emigrating from China. I opted to include only those from mainland China and excluded individuals from Taiwan and Hong Kong, in light of personal experiences as well as research evidence (e.g., Lai, 2013) showing that the three regions, although sharing many cultural attributes, differ in health-related understandings and behaviours. For example, compared to elderly people living in Taiwan and Southern China, those living in Hong Kong perceive having less social support available to them if they are to become sick or disabled (Lai, 2013).

Similar to previous social research on pain (e.g., Nicholls, Hill, & Nadine, 2013), my interest lies in the experience of persistent, bothersome, and non-specific pain in the body, rather than any medical diagnoses. For the purpose of this study, therefore, individuals were considered appropriate for the study if they self-report having pain in the neck, shoulders, back, upper limbs, hips, or lower limbs, even if they had never been formally diagnosed as having chronic musculoskeletal pain. In regards to pain duration, given that an accepted definition of chronic pain is musculoskeletal pain that persists for longer than six weeks’ time (Schultz et al., 2005), one inclusion criterion is that the individual’s pain must have begun at least six weeks ago. It should be noted that following the commencement of data collection, I became aware that a more updated definition of chronicity is three months or longer (Treede et al., 2019). Given that all participants had reported experiencing pain for three months or longer, it was judged that all individuals admitted into the study had met the chronicity criterion.

Whether an individual met the inclusionary and exclusionary criteria was determined through a phone screen interview. Participants were asked to describe the intensity of their pain by rating it on a scale from 0 to 10 (0 = no pain, 10 = the most pain their can imagine) and the impact the pain had on them. Individuals were included if they reported that their pain is
significantly bothersome or is at 4 out 10 or more. They were excluded if they reported having health concerns (e.g., diabetes, cancer, autoimmune disorders) that were more bothersome than their musculoskeletal pain, as I was interested in developing a grounded theory in which managing pain, rather than other chronic conditions, is the focal point. During this initial recruitment phase, approximately 20 individuals contacted the researcher to express interest and were subsequently provided with a phone screening interview. Eleven individuals met (10 female, 1 male\(^3\)) inclusion and exclusion criteria. Those who did not meet criteria included individuals who were from Taiwan or Hong Kong and those who experienced their pain as infrequent or unbothersome. Individuals who were excluded from the study were thanked for their interest.

**Semi-structured Interviews**

Semi-structured interviewing was the primary form of data collection. The interview consisted of open-ended questions to orient the participant to the general topic, and follow-up questions were asked to further explore concepts suggested by the participant (Charmaz, 2006). Consistent with previous investigations (Johansson et al., 1997; Wiitavaara et al., 2007), following the first few interviews, I conducted preliminary analyses (i.e., coding, constant comparison, generating initial categories, and memo-writing) to identify themes that are relevant for further exploration. Later interviews were then revised in order to access information that was relevant to the emerging themes (see Appendix C for an illustration of how the interview guide changed over time and across participants). Encounters with each participant were approximately two hours long, with the initial half an hour involving explaining and signing of the consent form, rapport building small talk, and answering of participants’ questions, and the latter 1.5 hours being spent on the interview questions (See Appendix D and E for the consent

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\(^3\) Genders are self-identified by participants.
form in English and Chinese). With the consent of the participant, all interviews were audio-recorded to allow for a more accurate transcription and an opportunity to verify transcripts (Francke & Theeuwen, 1994). All interviews were conducted in participants’ first language (five in Cantonese, 19 in Mandarin) by the researcher.

**Interviewing Approach.** Interview questions during this phase tentatively included concepts that were already familiar to me. These concepts included Leventhal’s common sense model of self-regulation (Leventhal et al., 1998), barriers and facilitators to pain coping (e.g., Schultz et al., 2005), and social impacts of chronic pain (e.g., Gatchel et al., 1995). In order to gather rich information encompassing the complexity of pain, interview questions that tap into pain intensity, physical functioning, emotional functioning, adverse events or symptoms, and treatment experience were included (Day, 2017).

To orient the participant to the topic of interest, I began by asking participants to provide their illness narrative (Bury, 2001), which is a story about their pain experience from their own perspective and usually includes turning points and challenges (Bury, 2001; van Huet et al., 2009). Illness narratives are assumed to be “shaped by social context and informed by cultural knowledge” (Garro, 1994, p. 775) and to reveal lay beliefs and explanations, moral qualities and core themes (Bury, 2001).

Participants in the current study were asked to provide an illness narrative about their musculoskeletal pain (i.e., “Tell me how you first noticed your pain problem. How did it start, what happened, and how did you deal with it?”). I followed a recommendation by Mathison (2015) of bringing to the interview several open-ended questions, preparing to ask more specific questions to elicit examples and details, and asking follow-up questions for clarification purposes.
Previous studies have found that interviews conducted in such a format require anywhere between one to two hours (Beaton et al., 2001; Johansson et al., 1999; Stewart et al., 2012).

Field notes. Field notes are a useful way to enhance richness in a data set, as they provide another perspective about the phenomenon under study (Charmaz, 2006; Strauss & Corbin, 1990). In addition to semi-structured interviews, I also endeavoured to write down my observations of the field after each encounter in the form of field notes. See Appendix F for a sample field note. These notes took the form of hand-written documents and journal entries into the software, Evernote (Evernote Corporation, 2019).

Transcription in Chinese. All interviews were transcribed verbatim into text documents in Chinese characters. The majority of Mandarin interviews were transcribed by a Mandarin-speaking post-graduate level research assistant (S.Z.), and verified by the writer, while all Cantonese interviews were transcribed and re-checked by the writer. Four of the Mandarin interviews were partially transcribed by the writer. It was important to generate Chinese transcripts rather than English translations, as participants’ meanings could become lost or changed through the process of translation (Temple, 2008), reducing the amount of information gained about participants’ direct experience. The decision to use the participants’ original language as much as possible is recommended by other grounded theory scholars (Barnes, 1996) and is consistent with the assumption that language plays a key role in symbolizing and shaping meaning (Berger & Luckmann, 1966; Blumer, 1969). In order to enhance transparency of the data interpretation process and thereby safeguarding the trustworthiness of the study (Nikander, 2008), all quotes included in the research report are reviewed by bilingual professor and dissertation committee member, M.C.Y. in order to verify the accuracy of the translations. To further enhance the authenticity of the data, member reflections are gathered during later
interviews to gain participants’ perspective about the unfolding concepts and hypotheses. By asking, “Am I on the right track? Did I understand this in the same way you meant it?” the researcher can verify the reasonableness of my ideas from the participants’ perspective (Carlson, 2010, p. 1105). It is reasoned that if the transcriptions of the interviews and translations of the meanings at the coding level are accurate, participants would find my unfolding theoretical framework to resonate with their experiences.

**Initial Coding and Constant Comparison**

According to Charmaz (2006), data analysis is an active process in which the researcher constantly engages throughout the research process. In the current study, my analysis of the data began once I gathered the first interview, at which point I jotted down field notes and re-listened to the audio-recording to identify any possible directions of my next interview. For the purpose of transparency and auditability, I documented the steps, experiences, thoughts, and problems that arose during the data analytic phase into the researcher’s journal. The next step was open coding, which involves line-by-line reading of each transcript, identifying small units of meaning and naming of these units with codes (Charmaz, 2006).

Initial coding began for the transcripts of Participants 2 and 6. Cross-linguistic translation of the data commenced at this phase, as I generated primarily English language codes from Chinese language transcripts. The approach of generating English codes from Chinese transcripts has been taken by other research projects (e.g., Smith et al., 2008) in which the interviews were conducted in Chinese but the interpretation and analysis were done in English language.

The initial coding process was facilitated by the qualitative data analytic software, *Atlas.ti* 8 (ATLAS.ti Scientific Software Development GmbH, 2019), which organized my codes and
their corresponding quotes in an efficient, searchable format. Examples of my early codes were “belief that pain is due to stagnant blood”, “being my own doctor”, and “diagnosed with bone spurs.” As I continued to read more about the grounded theory method, however, I realized that coding in gerunds would have prompted me to think more in terms of process instead of objects, and encouraged analysis as opposed to description (Charmaz, 2006). Therefore, later revisions of my codes contained more gerunds (e.g., “believing pain is due to stagnant blood”).

**Constant Comparisons**

Constant comparison is the task required to generate codes and categories and is one of the central features of grounded theory (Charmaz, 2006; Glaser, 1992; Glaser & Strauss, 1967). It involves comparing incidents (i.e., quotes and observations) with other incidents, incidents with codes, and codes with codes to find similarities and differences. Through this process, codes are revised to become more abstract and are elevated to categories. Then, categories are compared back with the data to check for its fit onto the data (see Appendix G for an example of these comparisons in the current study).

Constant comparison was started at the initial coding phase (Charmaz, 2006). Specifically, codes were compared with each other to identify any need for editing. For example, a comparison of *feeling disappointed in doctor* and *feeling disappointed in physiotherapist* indicated that they could be amalgamated and revised to become *feeling disappointed in a healthcare provider*. When coding a new transcript, each incident was compared with existing codes to determine fit and the need for creating new codes. As well, each incident was compared with each other incident in order to find similarities and differences. In this manner, constant comparisons were repeated as new data were gathered. This iterative process helps ensure that
the emerging theoretical concepts are grounded in the data (Glaser, 1992; Glaser & Strauss, 1967).

Initial coding of the first two interviews generated 555 codes, which suggests that my codes each have a low number of quotes and a low level of abstraction (Friese, 2013, 2016). In order to raise the level of abstraction of the codes and the meaningfulness of the code list, I deleted ones that seemed to have little meaning (e.g., *pain in the ankles*), amalgamated codes that seemed to go together, and elevated more complex codes to more abstract levels. For example, the codes *actively seek solutions, seek various pain treatment methods, striving to be proactive,* and *taking initiative* were merged to form the code *valuing being proactive.*

**Focused Coding and Creating Conceptual Categories**

Whereas the purpose of initial coding was to “mine early data for analytic ideas to pursue,” focused coding is the stage when this pursuit takes place (Charmaz, 2006, p. 46). The task of focused coding involves selecting initial codes that are particularly meaningful and interesting and trying to develop them by linking them with more data. In the current study, I began focused coding once I started seeing initial codes that were interesting and seemed to appear repeatedly across participants. These initial codes included *Avoid Expressing Pain, Not Wanting to Burden Others, Attuning to Own Symptoms, Value Being Proactive, Identifying with the “Subhealth” Label,* and *Avoiding Pain Killers,* among others. Focused coding in the current study began following the review of the third transcript, and continued throughout the analysis of the remaining transcripts. Through the process of constant comparisons among initial codes and incidents, conceptual categories were formed and constantly revised.
Memo Writing

Throughout the data analytic process, I wrote memos to further delineate the ideas I had regarding conceptual categories. Following Charmaz’s (2006) guidelines, memos were written in a free flowing manner, akin to a diary journal, with quotes that I copied and pasted onto the document to support my ideas. For example, in my early memo regarding the concept, self-doctoring, I wrote about the various properties of the unfolding category, including learning about pain, concealing the pain, and seeing pain as one’s own responsibility. I also wrote about any variability along a certain property, an aspect of the category known as dimensions (Strauss & Corbin, 1990). For example, concealing pain seemed to vary according to severity of the pain condition, such that those who experienced severe or acute pain were less likely to conceal the pain from their loved ones. Writing memos about these ideas facilitated the spelling out of a category. Memos were titled and entered into the software, Evernote, to facilitate sorting. See Appendix H for an example of a memo.

Sorting of memos refers to the act of comparing them and placing them within a concept map to form an overall theoretical picture (Charmaz, 2006). Throughout the iterative and cyclical process of data collection and analysis, the theoretical picture becomes clearer. To track the various steps of the theoretical picture, diagramming was done throughout the data analysis. Diagramming provides a visual representation of the how the concepts relate to each other. The final grounded theory was constructed in both the form of a narrative and of a diagram (Charmaz, 2006). See Appendix I for an example of the diagrams created throughout the analytic process.

Theoretical Sampling

After coding the first 11 interviews, I constructed the following conceptual categories: Treasuring Health, Subhealth, Pride/Honour, Being Proactive, and Interconnected Self. These
categories were defined and delineated in the form of memos. As I fleshed out the meanings of these categories, I noticed conceptual gaps that needed to be filled. In other words, the properties and dimensions of each category were not completely understood and needed to be clarified with more data via theoretical sampling (Charmaz, 2006).

In Charmaz’s (2006) words, theoretical sampling is the act of “seeking and collecting pertinent data to elaborate and refine categories in your emerging theory” (p. 96). In the current study, after having developed the category, Being Proactive, I realized that the properties involved (i.e., researching health conditions, reading about medications prescribed by doctors, using self-help strategies such as stretching) were repeatedly observed in female participants but not in the male participant. I became curious about whether the sex difference was due to a gender difference or an individual uniqueness in the male participant. In order to answer this question, I recruited males through placing an advertisement in a Chinese community website. The interview guide was also revised to intentionally query about actions of proactiveness.

I followed the same procedures of data analysis (i.e., coding and memo writing) for the other conceptual categories. The results of these steps led me to do a second round of theoretical sampling. Specifically, after gathering another 10 interviews, I noticed that there was something qualitatively different between those with mild and minimally bothersome pain and those with significantly bothersome pain problems. For example, those experiencing more bothersome pain were less likely to conceal their pain from their friends and family. In order to construct richer and conceptually fuller categories, I recruited participants with highly bothersome pain. This was done through providing a free Chinese community workshop on pain management to attract Chinese individuals living with chronic pain (see Appendix J for workshop advertising poster). Participants 21 and 22 had self-identified as having highly bothersome pain and were recruited in
this manner. By the time these two participants’ interviews were analyzed, my unfolding
grounded theory involved three major categories – Being Conservative, Self-reliance, and
Shunning Depression.

Following the analysis of the first 21 participants, I realized that the two categories,
Shunning Depression and Self-reliance, still required some explication. It was necessary for me
to continue collecting data until these conceptual categories were saturated (Morse, 1995). Three
additional participants were recruited for this purpose. After further analyses, the following
categories were formed: Valuing Fortitude / Forbearance, Preferring Conservative Treatments,

As noted by Charmaz (2006), some categories become more conceptually relevant than
others as analyses progress. Categories are regarded with more importance when they seem to
have “theoretical reach, incisiveness, generic power, and relation to other categories” (Charmaz,
2006, p.139). Important categories are the ones mentioned above. Categories that were
considered more peripheral and less central included Seeing Pain as a Sign of Subhealth and
Avoiding Pain Killers. Although these categories were grounded on an abundance of incidents,
they were regarded as less important because they did not account for central parts of the
unfolding theoretical picture. They were shifted to a less important status within the theoretical
picture, such as a subcategory or a property within a subcategory. A list of the final categories,
subcategories, and their properties are listed in Table 2.
# Table 2

*Core category, Categories, and Properties in the final version of CIPMIC*

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Properties</th>
</tr>
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| Chinese-informed Values and Beliefs     | Beliefs About Health                        | “If There is Pain, There is no Flow”  
                                          |                                                                                                       | “Pain is due to Subhealth”  
                                          |                                                                                                       | “The Body Heals on its Own”  
                                          |                                                                                                       | “Western Medications can be Harmful”  
|                                          | Treasuring Health                           | Seeing Health as Precious  
                                          |                                                                                                       | Being Cautiously Protective of Health  
                                          |                                                                                                       | Thinking Ahead About Future Coping  
|                                          | Valuing Fortitude / Forbearance             | Trying to be Proactive / Taking Initiative  
                                          |                                                                                                       | Valuing Courage, Minimizing Problem  
                                          |                                                                                                       | Valuing Self-Reliance, Not Burdening Others  
|                                          | Memories of accessing healthcare in China   | Availability of Diagnostic Tests and Specialists  
                                          |                                                                                                       | Family Doctors not a Primary Stop  
                                          |                                                                                                       | Patients Choose Where to Go  
| Actions involved in managing pain       | Choosing Conservative Treatments             | Minimize Use of Intervention  
                                          |                                                                                                       | Sticking to the Familiar  
|                                          | Self-Educating About Health                 | General Learning About Health and Pain  
                                          |                                                                                                       | Researching About Diagnoses  
|                                          | Engaging the Local Healthcare System        | Accessing Services  
                                          |                                                                                                       | Receiving Services  
                                          |                                                                                                       | Facing Roadblocks  
                                          |                                                                                                       | Disagreeing With Treatment Approaches  
|                                          | Taking Matters into Own Hands               | Skepticism About Providers  
                                          |                                                                                                       | Searching for Alternative Treatment  
                                          |                                                                                                       | Searching for a Diagnosis  
                                          |                                                                                                       | Maintaining Hope  
| I am my own pain expert                 | n/a                                         | Being Attuned to Pain Symptoms  
                                          |                                                                                                       | Knowing What Works  
                                          |                                                                                                       | Having a Sense of Acceptance of the Pain  
                                          |                                                                                                       | Having a Sense of Competence about Managing pain |

*Note: All concepts listed above comprise the core category, Seeking Resolution*
**Theoretical Coding**

In order to make sense of the conceptual categories that were constructed, I examined how each category might relate to each other through a process of theoretical coding. Charmaz draws from Glaser’s work in defining theoretical coding by describing it as integrating concepts to form a theoretical picture (Charmaz, 2006). It involves looking for linkages among categories, journaling, and drawing diagrams of what might be happening. A decision was made to undergo the more flexible approach of theoretical coding as opposed to axial coding as suggested by Straussian Grounded Theory. This decision was made based on my understanding that axial coding, which involves specific ways of drawing associations between codes, tends to impose a preconceived structure on the data rather than letting the data guide theoretical construction (Charmaz, 2006). Because this study aims to learn about a culture, I felt that it needed to be completely open to all theoretical possibilities suggested by the data. Therefore, I opted to use theoretical coding rather than axial coding.

To facilitate my theoretical coding process, I applied Glaser’s suggestion of attending to the “Six Cs: Causes, Context, Contingencies, Consequences, Covariances, and Conditions” (Glaser, 1978, p. 74). By keeping in mind that any of these six processes could be at play as I think about the conceptual categories, I was constructing a theoretical framework of the phenomenon (Charmaz, 2006). This framework would then be revised with the addition of new data, the elaboration of existing memos, re-sorting of memos, and revision of diagrams. For example, as I asked myself the question, “why are immigrants from China so adamant about avoiding pain killers?” I re-analyzed related codes, examined observations from field notes, and considered the non-verbal behaviours of participants. I became interested in the idea that perhaps there is a moralistic meaning behind avoiding pain medications. This process led to my
construction of the concept, *Valuing Forbearance When Facing Pain*, which then evolved into becoming a part of the category, *Chinese-informed Lens*. Other categories were also constructed through further analysis.

My final step in theoretical coding involved identifying an overall concept, or a core category, that draws all the components together to form an explanatory picture. As Charmaz (2006) notes, by moving beyond describing conceptual components and focusing on social processes, one can “gain a more complete picture of the *whole setting*” (p. 23). Because I was interested in providing an explanation of how immigrants from China managed chronic musculoskeletal pain, I re-analyzed the data with the questions, “how do they manage pain and what is the overall process?” Through further diagramming and journaling, I noticed that all participants seem to be looking for some sort of long-term solution, an answer, or closure about their pain. It seemed that, short-term solutions, such as temporary pain reduction, were not enough. I arrived at the construction of the core category, *Seeking Resolution for the Pain*. Moreover, it appeared that in the process of learning, managing their pain, and receiving treatment from healthcare providers, they are also gaining expertise about their own pain. These processes are incorporated into the final version of my substantive theory, which is detailed in Chapter 4.

**Member Reflections**

Member reflections, also known as member checks, refers to the seeking of feedback from participants about the unfolding analyses in order to include their voice and input into the final results (Tracy, 2010). This practice leads to additional data, further elaboration of the theory, enhanced authenticity of the data, and ultimately increased credibility of the study (Tracy, 2010). Qualitative researchers recommend seeking member reflections to ensure that the
resulting theory is grounded on the actual and authentic information supplied by the participants (Barnes, 1996; Charmaz, 2006; Seale, 1999; Tracy, 2010). Like previous studies of musculoskeletal pain using grounded theory methods (Beaton et al., 2001; Stewart et al., 2012), the current study included member reflections with a subset of the participants. In the current study, Participants 4, 5, 9, and 15 were given member reflection interviews. As suggested by other scholars (e.g., Harvey, 2015), I treated member reflection interviews as a dialogue between myself and the participant, in which I was open to editing, taking out, or adding concepts in the emerging theory. Therefore, I saw member reflection interviews as another source of data. The four participants who completed a member reflection interview expressed agreement in varying levels with all of the concepts I described (i.e., they believe that the concepts apply to them in some way).

**Saturation**

Saturation is the process of gathering data in order to construct a complete understanding of theoretical concepts. According to Charmaz (2006), “categories are 'saturated' when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of your core theoretical categories” (p. 113). Thus, it is regarded as a satisfactory endpoint for data collection. In the current study, I began integrating the categories to form an overarching theory after about 21 interviews. Two categories emerged as the most important – Being Self-Reliant and Being Conservative About Health. These two concepts seemed to have some kind of conceptual relations with nearly all of the codes in the data. I continued to collect data to saturate these two concepts during the member reflection interviews with Participants 4, 9, and 15.
As I continued to develop the main categories, *Being Self-reliant* and *Being Conservative About Health*, through memo-ing, journaling, constant comparisons, and diagramming, I realized that there was enough evidence to construct a third main category that would integrate the two existing main categories—Chinese-informed Values about Health. I then returned to the field to collect three more interviews to fill in any gaps in my understanding of this concept. After analyzing the data from these three interviews, I felt satisfied that all three main categories had reached saturation. I then checked the workability of my conceptual categories through one final member reflections interview with Participant 5. Upon receiving agreement from these this final interview, I felt ready to stop gathering data and finalize the analysis and writing of my theory.

**Ethical Considerations**

To ensure ethical practice, the current study followed guidelines of the UBC Office of Research Ethics (ORE; The University of British Columbia, 2016). As well, because I am a psychologist-in-training and my topic pertains to psychological health, I also drew from the practice guideline of the *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association, 2000). These guidelines have informed my design in regards to recruitment strategy, informed consent, confidentiality, storage and reporting of data, and clarification of the researcher’s role. The current section discusses these ethical considerations.

In regards to recruitment, the current study has offered a reimbursement of $30. This was decided based on a weighing of three concerns: 1) the reimbursement compensates for the amount of time and work provided by the participant (i.e., approximately two hours), 2) the reimbursement is enticing enough to attract participants to participate, and 3) the reimbursement is not so large that it is exploitative of participants who are financially strained.
Participants were asked to provide informed consent prior to participating in the interview. In order for them to be adequately informed, all communications regarding the study, including telephone screens, written informational materials, and consent form, were conducted in their first language. Prior to consenting, participants were sent a copy of the consent form detailing procedures and general purpose of the study, including risks and benefits approximately one week in advance (See Appendices D & E). They were encouraged to ask questions and to think about whether they wanted to proceed with the study prior to the date of the interview.

To ensure confidentiality of participants, all voice recordings, transcripts, signed informed consent forms, and written notes were stored in secure locked locations. Personal information, such as names and city of birth, has been altered on written reports such as the current dissertation to conceal the identity of participants. No audio-recordings were made without participants’ consent. Several participants shared difficulties with social isolation and difficulty with accessing services. In accordance to the psychologists’ ethical code of responsible caring, I offered such participants additional information, such as contacts to pain treatment clinics and Chinese-speaking mental health services. Limitation in confidentiality was also communicated to participants during the informed consent portion of the interview.

Criteria for Judging Quality of the Current Study

In order to produce research that is useful for the field, I endeavoured to include certain characteristics of quality into the current study. These characteristics include rigour, trustworthiness, transferability, and originality.

Rigour refers to the extent to which data collection and analyses are conducted in a manner that ensures quality, adequate abundance, and transparency. According to Tracy (2010), a study is considered rigorously conducted if the researcher has spent sufficient time to gather
interesting data, used appropriate data gathering procedures, and provided the reader with an explanation of how the data was analyzed. My strategies for enhancing rigour are to remain critical of my own work at each stage, to document my analytic decisions, and to seek feedback from my supervisors.

Trustworthiness, on the other hand, refers to the credibility of the study and plausibility of findings (Tracy, 2010). In addition to being rigorously designed and executed, a trustworthy study is also done with transparency in order to allow for evaluation and critique from peers. To this end, I sought auditing of my data analysis (Glaser & Strauss, 1967) by showing my supervisors my data, codes and pathways to generating concepts, and by seeking input from the researcher transcribing the data. Gathering sufficient data and spending enough time in the field also increase the credibility of grounded theory findings (Charmaz, 2014). Charmaz (2006) estimates that “25 interviews may suffice for certain small projects” (p. 114). In previous peer-reviewed grounded theory studies of musculoskeletal pain (Beaton et al., 2001; Stewart et al., 2012), approximately 20 participants, were needed to reach saturation. Therefore, given that I was noticing saturation of my constructed categories after 24 to 28 one-and-a-half hour interviews, I was confident that my substantive theory was resting on a solid foundation. Finally, member reflections also enhances the credibility of the final product (Charmaz, 2014; Tracy, 2010). Scholars note that member reflections garner more credibility for the study when participants are interviewed not merely for accuracy of their transcripts, but also for their input about the results (Birt et al., 2016). Following this recommendation, my member reflection interviews involved presenting the tentative theory to the four participants and then inviting their feedback. Their feedback was then incorporated into the study as part of the data.
Whether the grounded theory is relevant and workable is also an important consideration. According to Glaser (1978) a useful substantive theory fits the data and effectively explains observations in the social world. Given that my grounded theory was built from data and observations taken directly in the field, it likely has good fit with the data. A workable theory also explains a phenomenon across situations. As shown in Chapter 4, my resulting theory explains pain management among individuals with different levels of musculoskeletal pain problems. Finally, I attended to the level of resonance of my theory, which refers to the degree to which it portrays the experience under study (Charmaz, 2006). I took the opportunity to evaluate resonance of my theory by asking the participants how well they believe the theory describes their experiences.

Transferability refers to the degree to which emergent concepts appear to be relevant to other similar settings and situations (Popay et al., 1998). Data from the current study were gathered from individuals who are rich in Chinese background (i.e., first generation immigrants) and in experiences of chronic pain. The results of the study are likely relevant to other chronic health issues, such as managing diabetes, and to similar cultural contexts, such as immigrants from Taiwan living in the U.S. The transferability of findings also depends on the rigour and trustworthiness of the data. For example, if the data is trustworthy, the audience of the research would be more comfortable with making decisions in the field based on the findings (Tracy, 2010). In order to allow readers to make an informed decision about applying the current findings onto their situations, I have provided readers with a detailed account about how the data was gathered and analyzed, the context of the interactions, and personal experiences that would influence data gather and construction (Morrow, 2005).
Finally, I evaluate my study on the criterion of originality by asking the question, does my grounded theory “challenge, extend or refine ideas, concepts and practices” (p. 182)? My hope is that my substantive theory about how immigrants from China manage chronic musculoskeletal pain is an innovative extension of the current literature on cultural influences in pain management. To date, very few existing studies, if any, have aimed to understand chronic pain through the lens of a specific cultural group using qualitative research, much less grounded theory. I believe that the current grounded theory study would serve as a methodological example of how to construct a cultural analysis on a health topic that is distilled in a concise form (i.e., a single theory) while at the same time rich with details and context.
Chapter 4: Findings

In this chapter, I describe the substantive theory that was constructed from the data. Conceptual categories that make up parts of the theory and relationships among them were identified by employing the steps of the grounded theory method, as described in Chapter 3. Through theoretical coding, these categories and relationships were pieced together to form a coherent narrative. The result, a theory entitled, *Culturally Informed Pain Management among Immigrants from China* (CIPMIC) is a construction based on what the participants had said during the interviews and analytic efforts by the writer.

Overview of the CIPMIC

The theory, *Culturally Informed Pain Management among Immigrants from China* (CIPMIC) explains the process of managing chronic musculoskeletal pain among immigrants from China (ICs). The full theory is depicted in a diagram in Figure 1. The central concept is that ICs manage their chronic pain by actively searching for an effective cure, or a resolution, for the pain. They are not interested in gaining temporary relief from the pain symptoms; rather, they desire to resolve, or eliminate, the chronic pain problem at its root.

At the centre of Figure 1 is a set of circles containing four culturally informed approaches through which ICs seek resolution to their pain. These four approaches are labelled “cautious,” “self-reliant,” “critical,” and “proactive.” Each approach involves certain actions that are done in order to have the pain resolved, such as minimizing interventions out of fear of harmful side effects (a cautious approach) or seeking a second professional opinion about the pain diagnosis (a critical approach). In Figure 1, these four approaches overlap one another, indicating that they are not discrete or independent from each other, but are conceptually linked constructs with shared qualities. For example, to question a diagnosis given by a healthcare provider is
considered to be a critical approach, but to a lesser degree it can also be considered to be a cautious and proactive action. CIPMIC also states that each approach is informed by certain Chinese values and beliefs about pain. Hence, these four approaches are considered to be “culturally informed.”

Figure 1

*Diagrammatic Representation of the CIPMIC*
In Figure 1, Cautious and Self-reliant are coloured blue, indicating that they are used mainly by those with pain that is mildly bothersome, while Critical and Proactive are coloured red, indicating that they are used mainly by those with pain that is highly bothersome. According to the theory of CIPMIC, while all ICs with chronic pain have the potential to enact all four approaches to pain management, they likely engage in only the ones that are well-suited for them given how bothered they felt about their pain.

Those with mildly bothersome pain tend to be cautious about making health-related decisions. They opt for strategies that pose low risk for harm or re-injury. These include minimizing the use of potentially invasive interventions, choosing treatments that are familiar, exercising with care, and thinking about future consequences when choosing a treatment. While those with more severe pain problems may initially use a cautious approach, they tend to find such minimalistic (i.e., using as little intervention as possible) and non-invasive strategies to be insufficient to resolve the pain. In these situations, the IC may not be able to exercise as much caution as they would like, and may need to engage in Western medical treatments, which they see as riskier to their long-term health. Regardless of their pain level, ICs seem to hold certain values and beliefs that motivate them to be cautious. First, they strongly value physical health and place great importance in protecting it. Secondly, ICs believe that Western medications are harmful to the body, as it can damage internal organs. Finally, ICs report believing that the body has a natural ability to heal from musculoskeletal injuries, and therefore a healthy way to manage it is to let it heal on its own.

ICs who experience mildly bothersome pain also try to be self-reliant by resolving their pain on their own, without seeking external help. They prefer to keep the pain to themselves rather than burdening others, and regard chronic pain management as their own problem, and
theirs alone. Although this idea of self-reliance is something that ICs in general prefer, it is not feasible in practice for those with severe pain who need help from healthcare providers. In general, however, they prefer to be self-sufficient, and this preference seems to stem from an underlying value of courage in the face of pain and adversity.

For those who feel very bothered or distressed by their pain, sticking only to familiar and “non-invasive” strategies and relying only on themselves are unlikely adequate means of managing their own pain. Instead, they feel the need to also be proactive about seeking resolution to their pain. They do so by educating themselves on the topic, researching symptoms on the Internet, and actively seeking out new tools by talking to others. Their diligent seeking of solutions helps to enhance their hope that one day they will find a lasting cure for the pain, which in turn reinforces their behaviour of solution seeking.

In addition to being proactive, ICs with highly bothersome pain also try to be critical about treatment approaches and diagnoses they come across. Rather than taking physicians’ recommendations at face value, they tend to question them at the outset and to do their own research in order to make informed health decisions. At times, they disagree with their healthcare providers, in which case they might take matters into their own hands by seeking a second opinion. Their criticalness extends to the larger system of Canadian healthcare. Specifically, they have strong opinions about the effectiveness of Western medicine and the efficiency of the Canadian healthcare system. It is important to note, however, that ICs’ criticalness also leads them to appreciate what they perceive to be helpful medical treatments. ICs’ skepticism and criticalness may be attributable to their underlying beliefs. First, they seem to be convinced that chronic pain is always a signal of something that is wrong, such as blocked circulation and unhealthy internal organs. They reason that in order to effectively resolve the
pain problems, they need to find out what the root cause of the pain is. As well, ICs’ memories of accessing healthcare in China may also influence their expectations about healthcare in Canada.

Through the process of seeking resolution to their chronic pain in a culturally informed manner, ICs ultimately develop a new attitude that they are their own pain expert. This attitudinal state involves having a significant amount of knowledge of one’s own pain symptoms, a sense of self-efficacy that they can manage their pain effectively, and acceptance of the possibility that their pain could never be entirely resolved. It is a new attitude that then becomes a part of their belief system about chronic pain, as shown in Figure 1 by the box labelled “I am my own pain expert,” which is located within the outer grey region representing beliefs and values.

**Detailed Description of the Culturally Informed Pain Management among Immigrants from China (CIPMIC) Theory**

The current section describes the theory in detail. This narrative is organized into three components. The first component, entitled, “The Many Faces of Pain,” (See Figure 1.1) illustrates the manner in which the severity of pain problems can vary among ICs, and that the degree to which one feels bothered by the pain informs which approach is needed to resolve the pain. In the next component, the four culturally informed approaches to managing pain (i.e., cautious, self-reliant, proactive, critical), along with the beliefs and values corresponding to each approach, are delineated (See Figures 1.2a to 1.2d). Finally, the third component is a description of the resulting new attitude of seeing the self as a pain expert (See Figure 1.3). All English quotes presented here are translations of Chinese quotes, unless otherwise stated. As well, all names, including those of individuals and organizations referred to by participants, are fictitious.
The Many Faces of Pain

All ICs in the current study share a common belief that they have a chronic pain problem. An overarching process that seems to apply to all participants is that they are all seeking resolution to their pain. As shown by the arrow in Figure 1.1, however, the quality and intensity of their pain experience differ, with some ICs experiencing mild pain while others experience severe pain. Those whose chronic pain is only mild in intensity likely remain minimally concerned about their pain. Those with more intense pain, however, may start out with having only low concerns but gradually become highly concerned when they find difficulty in understanding and resolving their pain. The CIPMIC states that the specific pain management approaches that an IC chooses vary according to their pain severity and level of concern.

Figure 1.1
Section of Figure 1 Representing the Varying Degrees of Pain Bothersomeness

In general, ICs who have mild pain that is minimally disruptive seem to adhere mainly to cautious and self-reliant ways of management. An IC who seems to have a relatively mild pain problem is Janet (01), a woman in her 50s who is employed at an administrative job. She stated, “The pain I normally have is within a tolerable level.” When asked whether her pain had an emotional impact on her, she replied, “you say a big impact, I don’t feel that way. It’s just that
when I sit like this, I feel pain.” Furthermore, Janet, who has lived with her pain for about 10 years, seems to feel that she knows the reason for her chronic pain. She noted:

*My knee should be due to a fall that was never fully treated…maybe there was strong moisture, like what people say with arthritis…My neck, a lot of times when I do too much writing I’d feel, you know, because I always have my head down, within a given time span, it becomes a fatigue type of pain. As for the hand, theoretically speaking, I feel that it is due to wear and tear.*

Similarly, Lin (18), a professional chef who suffers from chronic knee pain, seems to experience his pain as mild and unencumbering. When describing the feeling of pain, he noted, “yeah, at that moment I feel uncomfortable, but there’s nothing I can do. That’s just how it goes. But, this motion I rarely do… it leads to some hassle.” To Lin, the root cause of his knee pain is not a mystery, either. He explained, “This knee, it’s the frigid air from the walk-in refrigerator seeping into it. These are remnants from the days when I was in China.”

For ICs like Janet and Lin, chronic pain is a nuisance but does not cause major emotional distress because their pain is reasonably tolerable, does not interfere greatly with their day-to-day lives, and has a root cause that is known to them. These individuals may not see their pain problem as requiring immediate attention, although when they do make efforts to resolve their pain problem, they do so with primarily conservative, passive, and self-help strategies.

At the other side of the continuum, a small group of participants report a much more arduous experience in seeking resolution to their pain. These ICs feel distressed and quite worried about their pain, and feel the need to have it resolved. Within the CIPMIC, they are considered to be highly bothered by their pain. Grace (05) is an example of an IC falling within this group. She appeared to be quite emotionally distressed about her pain problem. She
described having constant pain in her neck, shoulder, and low back. When asked how her musculoskeletal pain interferes with her daily life, she said,

\textit{Lots of interference. Sometimes if the pain is relatively, lasts relatively long, or even more so when the pain intensifies, it does interfere. First, it interferes with my work. Sometimes when I am doing house chores, it’s “the heart wants but the body cannot”—want to but because of pain cannot do it. Then at the same time impacts the mood.}

For Grace, what makes the pain especially hard to cope with is the fact that she feels unsettled about the root cause. She shared, “I feel that having this pain at my age, I feel it’s maybe too early, too early, I feel. Sometimes I feel really stress[ed] because of this pain.”

Another participant who seemed distressed with her pain problem is Connie (23), who sustained an accident four years ago. When describing how her pain impacts her daily life, Connie said in English, “I want to be useful, right? I don’t want to be useless sitting in the home. You want to do housework, making your room nice and clean. But after you do it, your pain gets worse and then lots of people help you, then you have to take pain killers and hurt your stomach.” She summed up her recovery process as “so many treatments, nothing work.” Despite several years of treatment seeking, she feels puzzled about the nature of her injury. She noted, “the question is I may have some unknown reason, you know, I suffer that much.” When talking about the emotional impact the pain has on her, she said, “of course you feel depressed…I just try to live for my children. I don’t live for myself at all…I want to join this (research) program because I want the medical professional know how much chronic pain patients suffer.”

For ICs like Grace and Connie, living with chronic pain is very difficult. Their pain tends
to be intense, constant, very disruptive, and intractable. Moreover, they do not have a satisfying explanation for their pain, furthering their frustration and agony.

Although ICs can differ widely from each other in their own individual experience of chronic musculoskeletal pain, they all have several aspects in common: they all prefer to seek resolution in a manner that is cautious and self-reliant, and when necessary, proactive and critical. Moreover, they all appear to share the underlying beliefs and values that motivate these approaches. The four approaches are described in detail in the following, along with an explanation of the underlying cultural beliefs and values.

**Being Cautious**

ICs desire resolution to their chronic pain, but they try to achieve it in a cautious manner. Participants in the current study described an intentional and dedicated effort to minimize risk to their own health. This involves limiting the interventions they subject their bodies to, opting for more familiar strategies, avoiding reinjury, and thinking ahead into the future when deciding on which pain management strategy to employ. In the current study, the cautious approach to managing pain seems to be especially relevant among ICs with pain that is mildly bothersome, which is depicted by a blue colour in Figure 1.2a.

**Figure 1.2a**

*Section of Figure 1 Representing the Cautious Approach to Managing Pain*
As well, this approach appears to be informed by cultural beliefs about pain, including the notion that health is precious and ought to be protected, that Western pain medications are toxic, and that the body has a natural ability to heal from musculoskeletal injuries. The association between these beliefs and the cautious approach to managing pain is illustrated in Figure 1.2a, and are described in the current section in detail.

**Minimize Interventions: Less is More.** ICs try to be cautious by minimizing the use of interventions that may lead to harm, such as pain medications and surgeries. This is especially apparent among those who reported milder pain severity. For example, for Shao (06), who has knee pain and was told that she needed a knee replacement surgery, the less intervention, the better. She said, “If conservative treatment is sufficient, then first use the conservative treatment…If I can still go out normally then I won’t replace it. I want to use such methods like San Qi (herbal medicinal) powder to see if it will slowly heal it.”

Lin (18) also tries to be minimalistic when managing pain, avoiding even over-the-counter pain medications, as he feels that some treatments may cause harm. When asked what level of pain would warrant pain medications, he said, “I’ve never thought of it, because I just take the pain and not take medication.” He explained his reasoning for generally avoiding medical interventions: “Based on the similar situations that I’ve seen, patients and such, really, often it gets worse with more treatment.” Rong (19), a soccer player who has had several months of shoulder pain but reported minimal interference by the pain, seems to agree when he said, “Some illnesses I think seeing the doctor too much might be bad for health.”

The wariness of the potential risks to treatments appears to apply not only to Western medical interventions, but traditional Chinese medicine as well. For example, both John (07) and Janet (01) doubt the safety of certain Chinese treatments and therefore avoid them:
John: Some people say “acupuncture would help you sleep better.” I said no way. I’m worried that it would worsen it.

Janet: Cupping or whatever... I don’t like that. I feel that it is risky. I prefer to lean towards the traditional methods.

Choosing Familiar Treatments. Another way in which ICs cautiously seek resolution to their pain is by only choosing treatments that they perceive as familiar. These include home remedies they had previously learned about in China. Even John (07), who reported a significant level of chronic pain, attempted to resolve his pain initially with more conservative, familiar approaches.

He described his sense of familiarity and trust in one such approach:

This is called Tiger Balm...usually when you have a mild injury or an ankle sprain or a fall, it’s very useful. Plaster it on for a couple times for a couple of days it always gets better, because it relieves pain and is also good for decreasing inflammation. Usually it resolves common issues. We use it for about 95% of the problems...it’s customary...Every household keeps some on hand. Chinese people, I’m talking about Chinese people.

Lin (18) also expressed trust for familiar remedies, noting that he uses a certain medicinal balm because it is part of his “traditional belief.” (傳統的概念) He explained,

“Typically, when we sprain something, it’s this medicinal balm...now that I have discomfort in my low back I also put this plaster on. This has been continued from when I was in China. When I was a child and I got injured, like a sprain, the habit is sometimes to stick this medicinal plaster on. If the wrist is sprained, stick this on, it will heal.”

Aside from prior usage, recommendation by friends or family is another way in which certain treatments gain the trust of an IC. This is evident in Janet (01)’s comment:
Someone told me, “Apply this cream. It’s good.” In the past I had a client who was from Hong Kong. I had a bruise here. “Oh, next time I will bring you a tube of this cream (from Hong Kong).” That’s how I know about it.

Jack (12), who seems to feel more concern about his chronic pain as compared to Lin and Janet, also seems to favour familiarity when choosing treatment strategies. He described opting for a therapist who has been vetted by a friend when he noted, “So then my friend he said he has a Chinese doctor who does acupuncture. He said he had seen them in the past. He said they’re good, worth trying, so I tried it.”

Based on what John, Lin, Janet and Jack have noted above, ICs, especially those with mild pain problems seem to choose methods that are familiar to them and therefore appear low-risk.

Avoiding Re-injury. ICs are equally careful in regards to physical movements and therapies. They appear mindful of their physical limitations and aware of their risks of re-injury. Billy (13), for example, reported exercising caution when doing chores around the house. “I don’t want to damage my own body, lifting things,” he explained. Feng (17) expressed a similar wariness about re-injury while doing chores. He shared, “If I’m shopping, I will come home and rest for a bit and lie down. Basically, avoid doing anything vigorous, like lifting or actions that damage the back…”

ICs are also wary of reinjuring themselves while exercising. Donald (15), for example, stated, “Everyone who knows about my condition tells me to go swimming, and stretching, et cetera. But if I stretch too vigorously, after a day or two it will hurt even more. Yeah, I can’t over exercise.” Similarly, Mandy (21) reported that while she does engage in regular walking
exercise, she tries to “walk quickly because I need to walk in small steps to avoid injuring my knees.”

A couple of participants noted that the avoidance of strenuous exercise is uniquely Chinese. They described this tendency, along with other habits such as keeping warm, to be important for Chinese people’s health due to their genetic makeup. John (07) stated:

*Chinese people typically are not big exercisers, so when they become injured, they tend to do passive exercises, not the active ones. This is a characteristic of Chinese people, and you can write this on your report. What do Chinese people typically do? Go to work, go shopping, or go for food or dim sum, [Ada: go for walks?] go for walks, but rarely go exercise like sprinting. White people would. They are different in this way.*

Feng (17) expressed a similar opinion when he said:

*Chinese people did not evolve from this (environment). If you move to here (in Canada) and you go out running everyday, everyday like Westerners, go drink cold water, in a couple of days you would go crazy, and will break down…The make of the machine is not the same. Although both are human, the difference is big. That’s my understanding.*

**Thinking Ahead.** Aside from being careful while exercising, ICs also reported trying to think ahead when deciding on how to manage their pain. Some of their actions, including avoiding analgesics, are done with their future well-being in mind. This tendency is demonstrated by ICs of both milder and more severe pain problems. For example, Alice (09), who has a relatively significant and protracted chronic pain condition, showed such future-oriented thinking as she talked about her decision-making about how much pain medications to use:
I use it gradually, already at a very low dose. Even the doctor said so. But I think, oh if I increase the dose, then I would feel better. However, as I feel better for a period of time, my body has already adapted to the dose. Then what?

Similarly, Shan (22), who has sustained a serious motor vehicle accident that necessitated several years of rehabilitation treatment at a hospital, also expressed a reluctance to use pain medications due to anticipated problems later down the road:

[In English] I know some medications like NSAID will hurt your kidney. You can take that for a short period of time, but not for long. [In Chinese] I feel it is not a solution that you can ultimately rely on forever...Not long-lasting. You can’t use this method in the long run, because it would have even worse consequences.

Ming (03), who in contrast to Alice and Shan reported only a mild level of chronic pain, has similarly expressed concerns about future negative effects of using pain medication. Specifically, she considers the potential for drug dependence with regular analgesic use. As Ming (03) stated, “Taking pain killers would lead to addiction… So it becomes drug abuse, drug abuse. It’s related. It really is related.” Janice (20) described a similar concern, noting, “I know a lot of Westerners become addicted after taking medications…on the media you can see that some ball players die from taking drugs.”

While Alice, Shan, Ming, and Janice think about future consequences of taking medications, Liang (04) thinks in advance about the potential problems of working over time. She indicated trying to maintain a “sustainable and healthy lifestyle” through thinking ahead when designing her work schedule. She explained, “I don’t want to work hard for one or two
days and then crash, and then it’s, it feels like a vicious cycle. Eventually, it would get worse and worse, worse and worse.”

ICs, even those with significant pain problems, such as Alice, Shan, Liang, and Janice, try to be cautious by thinking about their future coping. They are protective of their health not just in the present, but in the days and months ahead.

**In Theory but not in Practice: When the Pain Problem is Severe.** To be able to cautiously avoid taking any medications or seeing physicians would be ideal, but sometimes interventions are necessary when the pain problem reaches a significant level. John (07), who suffers from arm and shoulder pain, indicated initially trying to resolve the pain using familiar home remedies, only to find them insufficient and having to turn to medical interventions. He said:

*Initially after I fell I would use the Chinese medicine, it’s called Tiger Balm...
but actually it was not effective. After applying it, the pain remained...all the while, it wouldn’t heal, right...After four months it was still the same condition, with no improvement...still hasn’t healed, still not resolved. So at the time the doctor allowed me to do an MRI.*

Alice (09), who has suffered from years of debilitating pain, also tried to manage initially without medical interventions, but found that she was unable to resolve the pain in a minimalistic manner. She noted:

*Initially, I wanted to use the method of exercising...through stretching exercises...it got worse and worse. Then I sought help from the doctor... Western doctor, yes.*

For ICs like John and Alice, who experienced a significant level of pain, a complete avoidance of medical interventions turns out to be unfeasible. When they do engage in medical
treatments, however, they do so reluctantly. For example, Li (16) reported, “Unless the pain is continuous and is intense, like it lasts for half an hour and at an 8 to 9 severity, and I just can’t bear it. Then I take medicine.” Some described weighing the pros and cons before engaging in interventions. Alice (09) was an exemplar of this tendency. She reported trying to “to strike a balance, to compare the cost and benefit. I take one pain killer, I finish my work and do my job well, and I won’t feel so bad. Then I would take it.”

In summary, ICs appear to have a cautious style of seeking resolution to their pain problem. They minimize medical interventions, such as medications, which they perceive to be potentially harmful. Instead, they rely mainly on mild and low-risk strategies, such as light exercises and familiar home remedies, to try to resolve their pain problem. For ICs whose pain experience is mild, such as Feng (17) and Rong (19), relieving their pain symptoms does not appear to be as important as protecting themselves from potentially harmful interventions. For those who face a more intolerable level pain, they have little choice but to turn to medical interventions, such as medications, although they do so sparingly and judiciously.

Health Beliefs Underlying the Cautious Approach. The tendency for ICs to abstain from medications, choose familiar and low-risk strategies, and think about the future when making health-related decisions suggests a cautious style of resolving pain issues. The CIPMIC asserts that ICs’ cautiousness can be explained by an underlying set of health beliefs. These include 1) the idea that health is precious, 2) a belief that Western medications are partly toxic, and 3) an assumption that the human body has the ability to heal on its own.

Health is Precious so We Have to Protect it. ICs seem to have an underlying, implicit valuing of physical health and longevity, and a strong incentive to protect it through whatever means
necessary. As Li (16) noted, “you definitely care about your health. You stretch daily with the hope that you will live longer.”

Participants feel that their strong valuing of health is a part of their Chinese identity and is what distinguishes them from North American culture. John (07), for example, said, “(We are) very mindful of our health, to a greater extent than other ethnic groups. Between Chinese and Western people that is… the biggest difference.” Janice (20) also seems to regard the Chinese as being especially attentive about their health. She said, “the importance of keeping warm is a particularly Chinese concept…because I see Westerners always wearing shorts…And not only the young, but even the somewhat older ones still don’t pay attention to keeping warm.”

Health is such an important topic for Chinese people that they regularly chat about it within their social circle. Hua (02) recalled her experience in China, saying, “colleagues, friends, they naturally talk about this. They care a lot about health.” Similarly, Donald (15) reported talking about health with his friends in China via online messaging, saying, “there is sharing of information about health…Everybody in the circle of friends posts something…like eating what foods is healthy or eating whatever foods can prevent cancer. It’s normal.”

Shan (22) provided additional cultural insight about the importance of protecting one’s physical health. She stated, “There is an old Chinese saying that one’s body does not belong to oneself, ‘the body, hair and skin were received from father and mother’ …I think this is one of the reasons why we can’t self-harm. If we do self-harm, it is considered very immoral.” Although Shan was referring to the idea of self-harm, the notion that one’s body belongs to those who gave birth to them suggests that Chinese people may have a sense of duty to others to protect their own body from harm.
From the perspective of the CIPMIC Theory, the belief that health is precious and ought to be fiercely protected explains the vigilance that ICs demonstrate when seeking resolution to their chronic musculoskeletal pain.

**Western Medications Are 30% Toxic.** As previously shown, ICs tend to be leery about taking pain medications due to the transient nature of their effects, as well as potential side effects. To them, the momentary relief of their pain is not worth the negative impact taking the medications could bring. A common assumption among ICs is that all Western medications can cause damage to the body to some extent. Nearly all participants have expressed concerns about potential side effects of medications, be they over-the-counter or prescribed by a doctor. Billy (13), for example, noted that Tylenol “has strong side effects…after you take it you get drowsy.” Donald (15) also stated, “I don’t like to take medications. I feel that taking medications has side effects.” There is a concern that taking medicines repeatedly can have a cumulative impact on the body. For example, Janet (01), who regularly takes medication to manage her blood pressure, feels that her low back pain may be due to taking this drug. She noted:

> My low back (pain) here is puzzling me...Could be because I’ve been taking this medication for a while and that, with time, more or less there are some side effects.

John (07) agrees with Janet, evidenced by his statement, “All pain killers harm the kidney.” In fact, the idea that medications can be harmful is so ubiquitous that there appears to be a saying in China that goes, *all medications are 30% toxic* (shi yao san fen du). This saying was spontaneously given by Yue (11) when she said, “‘all medicines are 30% toxic.’ Medications are toxic too, right?” Similarly, when describing her reluctance to take analgesics, Alice (09) noted, “‘medicine is 30% toxic,’ so I don’t
want to take any.” Jack (12)’s comment exemplified the degree of caution that ICs take when he said, “Why do Chinese people choose not to take Western medications?…No matter how many milligrams you take, it will still damage the body, so they choose to not take any.” The idea that pain medications can be toxic for the body and damaging to internal organs explains well the ICs’ aversion to taking them.

**The Body Heals Itself.** Another health belief articulated by participants is that the human body naturally heals itself from illness and injury, and therefore, the appropriate course of action following a musculoskeletal injury is to give the body time to heal on its own, not subjecting it to invasive interventions. Participants with various levels of pain experiences have equally endorsed this concept. For example, Grace (05), who has reported an emotionally distressing level of pain for many years, explained:

> I feel that every person has a self-healing thing that is, as what Chinese doctors say, rooted in the body...That is to say self, self-healing. The body has a self-adjusting ability. I’ve read a lot of books, and listened to a lot of, for these illnesses, medicine can help you 20%, but at the end, realistically 80% is probably dependent on your own body to recover.

Rong (19), who described being minimally affected by his leg injury and pain, alluded to a Chinese saying which suggests that musculoskeletal injuries take a certain time to recover. He said, “generally Chinese medicine doctors in China will say, ‘tendon and bone injury takes three months to heal.’ Basically, everyone gets better after 100 days.” This concept was also subscribed by Jack (12), who despite having arm pain for approximately 10 years, still seems to apply this idea when thinking about his own pain:
Don’t let it worsen, that’s all one can expect. Well, “injuring tendons and moving bones takes 100 days,” right?...This is a Chinese tradition...moving bones means getting an operation...So 100 days or 3 months, yeah, so now the tendons, it’s pulled to this extent, for sure will not get better in the short term.

It seems that for Jack, “100 days” represents a general idea about the natural healing of musculoskeletal injuries, rather than a timeline to be taken literally.

Given the ICs’ belief that the body can heal on its own for certain illnesses, including musculoskeletal injuries, it follows that their initial strategy is to leave their chronic pain alone, rather than seeking medical intervention.

**Being Self-reliant**

Aside from being cautious, ICs also try to seek resolution to their chronic musculoskeletal pain in a self-reliant approach, acting as independently and self-sufficiently as possible. They see their pain as solely their own responsibility and therefore not something they ought to burden others with. As Shao (06) noted, “family members can’t have the pain on your behalf.”

The self-reliant approach to managing pain involves actions of handling the pain on one’s own and avoiding complaining about it to others. In Figure 1.2b, this approach is blue in colour. To reiterate, the colour blue indicates that the approach works well mainly in those with mild pain and low concerns. The CIPMIC further notes that the self-reliant approach is informed by a notion that one ought to show courage and fortitude when one faces pain and adversity. This value is also represented in Figure 1.2b as the white circular figure.
Figure 1.2b

Section of Figure 1 Representing the Self-reliant Approach to Managing Pain

![Diagram showing self-reliant approach]

**Trying to Figure it out Myself.** One way in which ICs endeavour to be self-reliant is by trying to understand the pain on their own. This involves analyzing their own pain condition and to think for themselves about how to resolve it. For example, Mandy (21) and John (07), both living with disruptive levels of chronic pain, show such efforts:

**Mandy:** That family doctor got me to exercise. I did some yoga. At the time, though, sometimes it seemed to get better, but other times it felt like, it seemed to come back, so I was very confused about that issue. Then recently I thought that perhaps my muscle, my leg and muscles are too weak, and I wonder whether strengthening the muscle could improve it.

**John:** I am currently thinking about this problem. Why, I think, that after four months I would still be in this condition, with no improvement? It's because based on my knowledge, there must be some kind of problem inside the shoulder. There is something we still don’t know, still not yet solved.

What Mandy and John demonstrated is an effort to figure out their pain problem on their own using the information that they have. They appear to seek resolution to
their pain by relying at least in part on their own judgement about what treatment is best for them.

**No Need to Tell Others.** ICs also try to stay self-reliant by avoiding complaining about their pain to others. Their tendency to keep their pain to themselves seem to be motivated in part by a desire to not incur an unnecessary burden onto loved ones. For example, both Li (16) and Ming (03) described trying to protect their parents from worry by not letting them know about their chronic pain:

- **Li:** *With your parents, for example, you don’t want them to know that you are suffering. If you tell your parents you have pain here, continuous pain, then they would get very worried.*

- **Ming:** *The pain in my body as you said, telling my sister and my mother and father, if I tell them, aside from worrying them, there is no benefit. No need to tell them, I think.*

Similarly, John (07) indicated a concern about burdening his spouse. He shared that when in pain he “rarely tells (his wife). Don’t want to tell her everytime pain occurs, or she will feel very anxious.”

The goal of keeping pain experiences to oneself is shared by all ICs, although for those with more severe pain experience, it is difficult to maintain. Alice (09), for example, described her struggle in trying not to burden her husband:

*When I have discomfort here or there I would complain. After complaining I would feel like I was being unfair to him. Sometimes, sometimes I cannot stop myself. Sometimes I will try to not say anything, to not say anything aloud.*
But then he is very caring, and would ask me. If he asks me then I will say something.

Similarly, John described occasionally being unable to contain his outward expressions of pain and accidentally revealing the extent of his pain experience to his wife:

But if I say, ‘ow, ow,’ she can hear me. She would come down, I am lying down downstairs, she would say: “why are you always saying ‘ow, ow’ to yourself? When you wake up in the morning I can hear you go, ‘ow’ always like that.” Because the pain woke me up. This the actual truth. It is very real.

For some participants, their reason for keeping their chronic pain struggles to themselves is that they believe that telling others about it is futile. To them, there is no benefit in revealing to others one’s pain problems unless it will assist them in resolving the pain. Donald (15), for example, sees no benefit in confiding in others about emotional distress: “what kind solutions would you be able to give me if I tell you? No solutions either, right?” Similarly, Yue (11) noted, “talking about it might give you some emotional release, but it does not solve the root problem, so… yeah, it is useless. There’s no point in talking about it.”

Many participants seem to have low faith in others’ ability to empathize with their pain, which further discourages them from confiding in others. Below, Shan (22) and Ruby (10), both of whom have experienced pain for many years, describe their perception of their family’s limited ability to understand their pain experience:

Shan: It’s impossible for them to empathize with you, impossible. Even if, I’ve gone through six years of treatment and have explained to my family and friends about my condition and difficulties, and that I need special care and accommodations, even now... (their) understanding is not a hundred
percent. So regarding these matters, even if you explain to other people, they still don’t understand so there’s no need to bother.

Ruby: I feel that (my children) won’t understand, because they have not experienced this kind of pain before. I think that every person needs to have experienced it personally in order to be able to understand you.

Aside from the perceived lack of benefit, ICs also refrain from relying on others for support in pain management because of their belief that their pain is only a small matter in the context of other challenges that adults face. Ming (03), for example, sees her pain as a common issue that does not warrant external help. She said, “My friends around me also have pain. Back pain, especially around our age, will happen. No one really thinks they need to see the doctor.” Jane (08), who struggles with parenting her young daughter on her own in Canada, seems to regard her pain problem as not nearly severe enough to warrant help-seeking: “I’m not gravely ill, right. If I’m gravely ill then I would need help from others.”

Even for ICs who are receiving medical treatment for their pain condition, their pain is dismissed as a small problem. Emily (24), for example, states “pain, it is a small matter. Adults typically wouldn’t mind pain too much.” Pain seems to be especially insignificant when considered in the context of other life issues. John (07), who despite having sustained a major arm injury four months ago and reported chronic intense pain, sees his musculoskeletal injury as “a very small matter” when compared to other challenges, such as applying for permanent residency status. Similarly, Mandy (21), who has an adult son with special needs, sees her low back pain as an insignificant issue in her life when compared to her worries about her son:

I feel that...it has a short-term impact, but long-term impact perhaps not yet. I feel that maybe it’s because my son’s situation affects my emotions a lot, so it
overshadows (the pain). [Ada: Oh, your own pain has become a small matter?]

That’s right.

The fact that John, Emily, and Mandy have also described their pain as only a small matter suggest that the tendency to downplay one’s pain is common among ICs in general, regardless of their pain levels.

Taken together, ICs in the current study seem to regard their pain problem as solely their own responsibility and therefore try to resolve it in a self-sufficient manner. They do so by trying to figure out the pain on their own and avoiding complaining about their pain to others. They wish to avoid worrying their loved ones and also feel that confiding in others about their pain is futile. In addition, ICs try to regard their pain with a calm and minimizing attitude. This was observed across several participants of varying reported pain intensity.

When Self-help is Not Enough. Although the ideal of self-reliance seems to be embraced by all ICs with chronic pain, it may be difficult to put into practice by those whose pain is more severe, as they likely need to reach out for help from healthcare providers. To be sure, ICs with severe pain still showed initial tendencies to be self-sufficient, but when they realize that their pain problem is beyond their self-help skills, they seek medical help readily. Alice (09) is an example of an IC who had preferred to handle the pain independently, but eventually relented and sought medical help. She explained:

I wanted to ...rely on myself... to not rely on people, right. Go check online, and after finding out information I might guess on my own what to do to get better. The result is that it got worse and worse. Then I sought help from the doctor...
Like Alice, Ruby (10) was also unable to gain a sufficient handle over her pain using self-help strategies that she had previously relied on, and therefore had to seek additional advice from rehabilitation professionals:

_All the while when I was in pain, I would, you know, apply ointment, take pills, but it’s no use, not even one bit...Woodlock Oil, pain relieving oil...at the time I was under a lot of stress and it got even worse...so I asked the physio and the massage professionals... and they said it should be because, mostly likely because I use my right side more._

In fact, when ICs perceive their pain to be intense, emotionally distressing, and worrisome, they actively seek help from medical professionals. Connie (23) exemplifies someone who desperately sought help. She described her efforts in obtaining services:

_[in English] I know there’s a new doctor, they just opened a clinic in Walmart, near Walmart... So I’m thinking, and you know, I have to take a chance. So I went there, and then he, he didn’t want to do MRI either. But I just told him, you know, doesn’t matter if you don’t want to be involved in ICBC or WCB, that’s fine... I just want you give me like MRI to find out what’s wrong with my arm. So finally he ordered the MRI... actually I should thank for him doing that because no one want to do it for six years._

Similarly, Janice (20), who had sustained a major car accident and a complicated recovery afterwards, recalled seeking help from healthcare professionals frequently as she felt worried and confused about her pain condition. She said, “That feeling of numbness made me think that maybe I had become paralyzed....wow, it scared me like that. So I rushed to there, because I had just finished physiotherapy, I rushed to the physiotherapist and asked, ‘why am I like this?’”
In summary, while self-reliance is important for ICs when managing chronic pain, it is not an approach that they can solely rely on, especially when their pain problem is severe or has reached a concerning level. Instead, ICs with a significant level of pain promptly seek help from medical professionals and readily lean on their advice and service.

**Facing Pain and Adversity With Courage.** What motivates ICs’ preference to be self-reliant when managing chronic pain? It appears that their self-reliance is driven in part by a valuing of courage when facing adversity. ICs in the current study seem to view hardship itself as character-building, and therefore an enriching part of life. As Billy (13) stated, “it is an important lesson in life, to go through trials and tribulations. In life, you can’t have everything smooth in an even path. So some people, you see why they can withstand so much…a lot of people end up stronger.” In fact, Ming (03) noted that, regarding chronic pain, “some people would see it as a form of training.”

Valuing courage in the face of suffering and chronic pain, as described by Billy and Ming, had likely developed from past socialization and upbringing experiences in China. Jack (12) and Grace (05), both having left China during their young adulthood, shared stories they had learned in China of people who were celebrated for having courageously endured extreme pain and hardships:

Jack: *They say that (historical figure) Guan Yu at the time was shot in the arm with a poison arrow. Well, he was a very brave and manly hero. He didn’t even seem like he had any pain, didn’t yell at all... then Hua Tuo helped him by cutting away the poisoned flesh from his bone. Like, no pain killers or anesthetic. None. And Guan Yu was holding the Spring Autumn book while being scraped and treated.*
Grace: When we were little, we often received education about a person in China named Jiao Yu Lu. He was the type... you can say, in our current view, a workaholic. He was very studious in his work and had a strong sense of responsibility, but at the end he died of exhaustion. So he had a lot of pain too. Looking back, it turns out he was regarded as a role model...

When we were little... at school they say “be like comrade Jiao Yu Lu.” The whole country of China, right? Essentially, he died of exhaustion.

Chinese teachings such as the ones described above suggest that ICs’ insistence on being mentally strong and self-sufficient in handling pain is borne out of social norms and expectations stipulating that it is one’s responsibility to handle their own pain. John (07), for example, seemed to subscribe to these norms when he said, “if you can bear it on your own then don’t say anything. I feel that is what a real man or a real woman would do.” These expectations also appear to be felt by ICs themselves, further discouraging them from expressing their pain and distress to others. Hua (02), for example, reported being aware of potential judgment from her friends and acquaintances if she is to talk to them about her pain-related difficulties. She said, “(when) meeting up with others, they don’t like it when you talk about your negative things. Since pain is a negative thing, other people won’t like it.” Connie (23) shared a similar sentiment when she shared in English, “Nobody wants to hear you’re in pain. That’s how I feel.”

Taken together, despite having immigrated to a new country, ICs seem to continue embracing an ideal that they have been brought up with in China—to face pain and adversity with courage and mental strength. This cultural value appears to motivate them towards being self-reliant when seeking resolution to their pain.
**Being Proactive**

A third approach to managing pain among ICs is being proactive. This approach involves diligently seeking out information and tips about managing pain, and trying out various solutions. As shown in Figure 1.2c, the tendency to proactively seek out and implement pain management strategies is motivated by a desire to maintain hope.

**Figure 1.2c**

*Section of Figure 1 Representing the Proactive Approach to Managing Pain*

Also shown in Figure 1.2c, being proactive is an approach that is favoured more so by those with pain that is highly bothersome, as indicated by a red colour. According to CIPMIC, not all ICs feel the need to be proactive. Those who experience their chronic pain as relatively mild and unconcerning have less incentive to be proactive. Feng (17), who would likely fit in the milder side of the pain severity spectrum, exemplifies this state of nonchalance when he reported, “I don’t purposefully go do this exercise, including what they say about swimming being very good for the spine. [Ada: Is there something that keeps you from doing this?] Laziness [laughs]. In actuality, the pain has not become so severe that I feel I must do it.”

Similarly, in Li’s (16) case, the chronic pain has not yet reached a concerning level, and therefore any solutions he has in mind are only in the planning, rather than executing, stage. He shared, “If the pain persists, I will consider adding an insole into my shoe, because if you make it softer, it might relieve it.” Janet (01), another participant with mild chronic pain, also
expresses a lack of urgency about adopting new strategies for addressing her chronic pain. She noted:

> Perhaps I need to improve my kidney health a bit, I feel. [Ada: How would you improve your kidney health?] Starting today, tomorrow I will start to think about this problem. Right now I don’t have any idea(s) [laughs]...but I will think about it with my friends.

While ICs such as Lin, Feng, and Janet find their pain minimally disruptive and experience little incentive to actively seek solutions, others feel quite concerned about their pain and experience an impetus to doing something about it. As an IC feels more bothered and concerned about their pain, one begins to turn to a more proactive approach.

**Seeking Pain-related Information.** Several ICs reported efforts to be proactive by being on the lookout for information about chronic pain, treatments and remedies, and general tips for maintaining good health. Jane (08), for example, explains how she tries to educate herself about her back pain through reading:

> I just need to look for books that are about health self-management, and then I find the particular section to see how to care for my spine. Right now, lots of books talk about that.

Shao (06) also tries to learn more about pain management through consuming popular media. She noted that she watches *The Health Maintenance Place* (“yang sheng tang”), which is a show that airs in China. She indicated, “They have a lot of famous doctors talking about various topics. Sometimes they would talk about the possible causes of pain problems, how to maintain health, and take what kinds of medicine and diets.”
It appears that self-directed learning affords the IC a sense of agency and control over their pain. When asked what helps her cope with her chronic pain, Shao (06) noted, “I feel that knowledge gives me power.” Hua (02), a single mother with low back pain, seems to share this sentiment. When asked what gives her strength to handle her life hardships including her chronic pain, she noted, “the things I gain from books. They have become a part of my thoughts. They give me confidence and courage to overcome hardships.”

While ICs like Shao, Jane, and Hua use self-guided learning as primary way of proactively seeking resolution to their pain, others with more significant pain problems (e.g., those feeling concerned or distressed by their pain) are likely to use learning as a supplement to other strategies, such as consulting a physician. Alice (09), who has suffered from years of debilitating pain and has seen numerous healthcare professionals, is one such example. She reported taking “an educational course …talking about pain science, how pain occurs,” in addition to the specialist appointments when attends. Similarly, Mandy (21), who signed up and attended the community pain workshop in April 2018 facilitated by the writer (see Chapter 3 for a description and Appendix J for the advertising poster) noted that she attended in hopes of learning “treatment methods and the like,” in addition to consulting physicians. For Alice and Mandy, self-educating is only one of several strategies that they employ to try to gain resolution about the pain.

ICs also try to accrue pain-related information by taking opportunities to talk to others. Donald (15) explained the value of learning through socialization: “if a person wants to share (information) with me, I will share with them, because everybody has a way of dealing with pain…For example, take hot showers, go sit in a hot bath, whatever ailments we can share and talk about it. It’s possible that you know something that I don’t, and I know something that you
don’t.” Shao (06) shows a similar keenness when she explained how she tries to self-educate about pain. She shared, “my method is learning via the Internet...Also, asking friends and seeing what experiences they have, including talking to you. I hope that in the future if you have any useful experiences you can tell me.”

In addition to gathering general information and tips about pain management, ICs also proactively educate themselves about diagnoses given by their healthcare providers. Donald (15) and Liang (04), for example, reported researching on the Internet about the conditions they were told they have, as shown by the following quotes:

*Donald: (the doctor) told me, ‘you have (a diagnosis of XX).’ At the time I didn’t know this term, and back then there were no smart phones, so I went home to check online what it is.”*

*Liang: I found similar information on the Internet, saying that this (diagnosis) is essentially psychologically-related.”*

**Trying Various Treatments.** For those with more severe levels of pain, being proactive tends to involve diligently searching for a treatment that is a good fit. For example, Shan (22), who has a severe level of pain following a serious car accident, noted, “I started seeing this chiropractor in 2013, and also this physiotherapist, and also massage.” She has sought additional treatments by asking for opinions from various individuals in the medical field. She said in English, “My physiatrist had suggested treatments. Nerve block, Botox, I asked around, and this nerve block I have actually not tried in the past... When I look at it I didn’t think that was a long term solution either...so, I looked for something else.” Grace (05) also described trying a variety of medical interventions: “tried a lot of methods, acupuncture, physio, and chiro.”
In summary, immigrants from China take on a more proactive approach when their pain reaches a concerning level. They are on the lookout for tips and strategies on managing their pain and try to acquire information through television, the Internet, and talking to others. For those who find it necessary to seek external help from medical professionals, they proactively educate themselves about the diagnoses they are given and diligently try out various treatment options.

**Family Obligations Make it Hard to be Proactive.** Family obligations seem to preclude an IC, especially one with only mild pain problems, from actively seeking out various pain resolving strategies. Jane (08) explained that it is common for middle-aged Chinese adults to deprioritize their own needs. She shared, “Those of us from the 60s, our thinking tends to be conservative and we place individual interests in the lowest priority and place the needs of the family… at the forefront.”

According to participants, when they are busy meeting others’ needs, the incentive to spend any time, thought, and effort on managing their chronic pain is low. For those who have young children, the notion of working on improving their pain, such as through exercising, remains to be an idea, rather than a practice. This was exemplified by Ming (03), an “astronaut wife” with two young children. She said:

*In order to restore my own health, I would need to wait for them, at least until my daughter is old enough and can take care of herself. When that time comes, it would be much better… Oh, then I would, because I would have more time,* and wouldn’t need to spend so much energy on taking care of them.

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4: An astronaut wife is a woman who had immigrated to Canada with her spouse, and has remained alone in Canada to care for the children while the spouse returns to the source country to work (Chang & Darlington, 2008).
Donald (15), a father of a five-year-old child, described a similar plight when he stated, “This is what my situation is like. I can’t every day do whatever, I have a child here. You need to take care of her. She is still very little. Maybe if the child is grown, or if you’re a senior, and don’t have things to do, or the sort who don’t have any children, then you can go do some exercises.”

ICs like Ming and Donald recognize that it would be helpful for them to proactively maintain their health through exercising more. They do not believe, however, that they have the luxury to do so because they need to prioritize their childcare and family obligations.

**Action Helps One Stay Hopeful.** ICs’ insistence on being proactive—that is, diligent, active and keen—appears to be driven by a desire to maintain a positive outlook and to keep their hope for recovery alive. When talking about her pain condition, for example, Liang (04) noted, “as an illness I think one needs to take initiative to treat it, and to look for a cure. But also, do not become dejected because of this illness, or become depressed.”

As some participants have noted, to keep on searching for a solution can help maintain one’s hope that one day they can put an end to the problem. Shan (22), who has proactively sought solutions for her chronic pain, explained in English, “When I reflect on why I didn’t get depressed, I think it’s because I take action, I try to look for solutions. When I do that, I have hope.” Grace (05) also seems to regard having a proactive coping style as important in managing chronic pain when she said:

*A proactive and positive person, even though they have pain, I believe they would proactively face this pain, and not allowing it to become a burden.*
Alice (09), who has lived with chronic pain for 10 years, credits her persistent attendance at a pain clinic for her current positive outlook. She said, “I still go as they might have some treatment methods. That gives me hope anyways.” Similarly, Donald (15), who has a spinal disease, seems to believe in the benefit of staying proactive, noting that, after nine years of pain and receiving treatment, he still looks for new information from the Internet. He shared that he would “take a look to see if there are any new developments, if there are any, for example new treatment methods. Holding out a glimmer of hope, right?”

Taken together, it seems that staying active in looking for solutions to their chronic pain problem is important for ICs from a mood-management perspective. To ICs like Shan, Alice, and Donald, the act of continually seeking for solutions reinforces the idea that there is a solution out there, and hence maintains their sense of hope.

**Being Critical**

The fourth and final approach to managing pain as outlined in the CIPMIC is being critical when seeking resolution to pain. ICs in the current study generally describe a tendency to be critical and evaluative about the information, diagnoses, and treatment approaches they receive or hear about. There is an intentional thoughtfulness about the opinions and treatments they come across regarding their chronic pain. Their critical approach involves evaluating or questioning treatments, seeking a second opinion when they do not agree with their provider, acknowledging the benefit to the treatments they receive, and critiquing the Western healthcare system.

The critical approach is especially evident among ICs who are more distressed by their pain. As shown in Figure 1.2d, this approach is red in colour, indicating that it is applicable mainly to those who find their pain highly bothersome.
Evaluating Treatments. Several participants described being critical-minded about the pain treatments they learn about from their social circle and healthcare professionals. Prior to adopting any suggestions, they first try to find out more about them, rather than taking them at face value. Regarding a home remedy that was recommended by friends, Ruby (10) stated, “For example, using the infrared heat device…normally, I don’t just trust, I can’t just non-selectively believe people and try whatever they suggest…I feel that after analyzing it, if there is an explanation for it, then I will try it.” For those who receive diagnoses and prescriptions from doctors, they would first research about them on the Internet and then make an informed decision. For example, John (07) shared, “Sometimes I check the Internet. When the doctor tells me things, I still want to form my own judgment – can I do this (treatment).” Donald (15) described a similar thought process in greater detail. He said:

(The doctor) prescribed a third medication...do you know it, Humera?...It’s covered by the government, but I did not take it. I didn’t take it, because I researched it on the Internet. In Germany there was a study done on this medication...and found that it might lead to lymph cancer...for example, in several thousand cases, there was one case of lymph cancer. I feel that my
ankylosing spondylitis would not cause death, right. If I get lymph cancer...I will die immediately, like in one year.

Aside from questioning the appropriateness of recommendations that are offered to them, ICs are also critical of treatments that they have already received. Grace (05), for example, reported thinking back about the therapies she has experienced and “realizing more and more that the benefit is not obvious. Maybe right after the treatment, my whole body feels more comfortable, but after a couple of days it comes back, the pain. It’s better, then worse, then better, endlessly.” Similarly, Alice reached negative conclusions about her physiotherapy experiences, noting “I didn’t like it because my shoulder, this is for the first injury, it was re-injured under their direction.” Donald (15) also expressed negative sentiments about a multidisciplinary rehabilitation program that he had attended. He stated that the “rehabilitation is pointless. It’s a scam. You go, out of ten sessions, three are spent filling out questionnaires…then you do rehabilitation, using a small device, very mild, almost didn’t feel anything…then it’s more classes, more classes. What’s the use of the classes? It doesn’t cure illnesses.”

Seeking a Second Opinion. When ICs disagree with their healthcare providers’ assessments, they may feel so dissatisfied that they take matters into their own hands, seeking alternatives to what healthcare professionals have provided them with. For example, Shao (06) described seeing her doctor’s recommendations as inappropriate for her condition. She noted, “The Western doctor said, ‘oh, you need to replace your knee joint.’ Oh no, I don’t want that.” She described then seeking out alternative treatments using other resources at her disposal. She shared, “At the end I paid out-of-pocket to see the Chinese doctor, for blood-letting treatment.”

Liang (04) was another participant who expressed skepticism about her healthcare providers’ conclusions and then taking matters into her own hands. She explained, “I have been
seeing (the doctors) for ten years for my pain, and they still don’t have any conclusions...They even told me, ‘this pain we can only tell you the name of it, but we don’t know why, and we don’t know how it started, and we don’t know how to cure it.’ This is what I gathered as the conclusion from Western medicine.” She reported seeking a second opinion from Chinese medicine, and subsequently getting the explanation she sought for her pain condition: “Didn’t I tell you that I saw a Chinese doctor for half a year? They explained to me the reason, and told me why I have pain.”

Like Shao and Liang, Emily (24) was also dissatisfied with her physician’s conclusions. She explained her reason for believing that her pain condition is under-diagnosed:

*Dr. X said that (the problem) is only at the surface skin level, but if you can see it at the skin level, then your internal organs is the same, right...you say that there is nothing wrong with the cells of my internal organs? That’s impossible.*

Emily subsequently shared, “that’s why I have stopped taking the medicine” and noted that she hopes to go to China undergo a certain procedure to get further assessed: “I want to go investigate…I want to go back to China to do the, do the, what’s it called, I forgot.”

**Acknowledging Benefits.** Not all of ICs’ evaluations are negative, however. Some participants showed criticisms that were in favour of the treatments they were prescribed. This is shown by a quote from Janice (20), who shared the following:

*(The doctor) told me to take pain killers and I didn’t take it...Yeah, I was stupid. In retrospect...I didn’t know that pain killers have an anti-inflammatory effect. I thought that since my pain wasn’t that bad, like I could still bear with it, that’s part of our Chinese culture...Always thinking, “don’t take so much medication,” so I thought since I could handle it, I*
didn’t need to take it. But now that I think back, why, if I had taken some
pain killers then maybe inside it wouldn’t be inflamed.

Other participants described taking to heart their healthcare providers’ recommendations, and
incorporating them into their daily lives. For example, regarding her impression about her
family physician’s advice, Mandy stated, “(the family doctor) feels that exercise can solve the
majority of the problem. I feel that this advice is reasonable,” and that, “these days, I basically
try to speed walk four times a week.” Liang (04) also described her process of learning
something from her pain program and then applying it into her life:

This I learned from XX Pain Clinic. In that clinic, they specialize in talking
about this problem. They say especially for people with (a diagnosis of XX)
like me, you need to pay attention to the energy you use, and not go over the
line. This is why I refuse to increase my work hours. I need to keep my work
load and rest time well-balanced.

Critiquing Western Healthcare. ICs’ propensity towards thinking critically about their chronic
pain problems and about treatments that are available inevitably results in some well-articulated
opinions. The current section describes two opinions that seem to be widely shared among
participants in the current study—the idea that the Canadian healthcare system is inefficient and
the conclusion that Western medicine is limited in its capacity to resolve chronic pain problems.

Canadian Healthcare System is Inefficient. One conclusion that ICs seem to have reached after
coming to Canada is that the healthcare system is inefficient in regards treating illnesses. Several
participants in the current study spoke about a lack of timely access to healthcare specialists in
Canada. Janet (01), for example, noted that “the wait time is really long” and illustrated her
point with the following story:
I have a friend—he has since died, but he lived five extra years. An examination found that he had liver cancer. Then, his doctor told him, "here (in Canada), you will need to wait about three months before it’s your turn. It may spread very quickly. If you have connections in China, then you should go back to get treatment.” He got the diagnosis one day, two days later he left Canada.

Shan (22) also articulated a similar criticism about accessing specialists in Canada. When asked about her experience with finding a specialist, she replied with the following:

[in English] You’re not allowed, actually. You cannot go see experts, um... specialists. You have to have referral. You have to wait. I think that really drive people crazy, so frustrating because the doctor say oh you need to go see the pain doctor. The wait time is half a year. People live in that problem everyday, and a half year wait!

Hua (02) explained her opinion about the waitlist being too lengthy when she said:

When you are sick, you go see the family doctor. It’s a long period of time.
When you go see the specialist, it causes an undue delay in addressing the illness.

Jack (12) shared a similar concern about the perceived difficulty in accessing a specialist. He said, “Chinese people have a saying that goes, ‘for illnesses, early intervention is best,’ right. So when you don’t have, like when it hasn’t worsened too much, go see the doctor, right.”

Western Medicine is Ineffective for Chronic Pain. Another conclusion described by participants is that Western medical approaches are generally ineffective for addressing chronic
pain. The primary complaint heard amongst participants is that Western medicine overemphasizes the use of symptom-reducing medications and lacks the ability to cure the problem. Hua (01), for example, spoke with disappointment in her tone of voice, “I’ve checked with the family doctor. He said, ‘don’t over-exert yourself,’ ‘don’t remain in the same position for long,’ and ‘do some exercises.’ That’s it.” Ruby (10) shared a similar sentiment, noting that she was unable to gain answers from her family doctor about the cause of her chronic pain:

They said ‘you have pain, but we don’t know what the reason is.’...even the family doctor said that. They said you can only take pain killers...You see them when you have pain, and when you see them, they give you pain killers.

Every time it is like that. So you feel that it does not solve the problem.

Some participants reported believing that Western medication is only able to reduce superficial symptoms, but not improve the underlying disease that is causing the chronic pain. This sentiment is summarized by their use of the Chinese proverb, “it addresses the symptoms, but not the cause” (zhi biao bu zhi ben), which can be translated colloquially into English as “just a Band-Aid solution.” Grace (05) was one individual who mentioned this concept. She said, “we have a saying, ‘just a Band-Aid solution’ right. That means it only temporarily controls your pain, allowing you to not feel it, but it does not actually cure it at the source or treats it, or cures the pain.” Lin (18) shares this sentiment, stating, “Pain medication is only, what do you call it, emergency, temporary, emergency, when one has an immediate need to relieve the pain, but it does not cure the problem, only takes care of superficial symptoms.”

Shao (06) also seems to find Western medical doctors ineffectual with treating chronic pain. Her critique of Western medicine is that its strength lies in acute conditions, but not in chronic conditions. She said:
You go see the family doctor, they wouldn’t be able to help you. Oh, draw some blood, give you some pain killers. So our kind of pain problem, other than physiotherapy, Western medicine does not have any other methods. Western medicine is more advanced, though. For example, if there is a problem somewhere, they can excise it. They can cure major illnesses, acute illnesses, the urgent ones. Ours is a chronic, mild problem.

Li (16) shares the same assessment with Shao, illustrating his point about Western medicine by comparing with traditional Chinese medicine:

With intense pain, see the Western doctor. Everything else, rely on Chinese doctor. Also, some physiotherapy. I trust physiotherapy. Chinese medicine’s acupuncture, cupping, and also some heat pads, electric heat treatment. I trust these, because the pain is chronic. Western medicine I feel has its merits, such as surgeries, and quick pain relief. But for milder conditions like mine Western medicine doesn’t have much of a solution.

According to participants such as Grace, Lin, Shao, and Li, their experience of Western medicine is that it has limited capacity to treat chronic pain, especially in the way that they expect. They do acknowledge strengths of Western medicine, however, including the ability to bring down acute pain and to treat acute health conditions.

For a few of the ICs, their negative opinions about Western medicine and the Canadian healthcare system have prompted them to become more self-reliant and less help-seeking. Mandy (21), for example, described a low desire to wait for a specialist due to her skepticism about the efficiency and effectiveness of the Western medical system. She reported:
[Ada: You’d really rather use your own method than…] It’s because it takes too long...you have to spend a lot of time looking for a specialist and wait on the waiting list. It could be a year and you still are not on the track to getting treatment. And on top of that, after you go, from everyone’s experiences, it’s not really useful. Therefore, I don’t want to engage in this type of thing.

Similarly, Connie (23), who had earlier expressed significant frustrations regarding her physicians’ reluctance to meet her request for an MRI, expressed in English, “The people who have chronic pain, you have to treat yourself. You do the research, you do everything …” Like Mandy, Connie described disillusionment with the Western medical system and a subsequent tendency to rely on herself for pain management.

The current section shows that in addition to being cautious, self-reliant, and proactive, ICs are also critical-minded when seeking resolution to their chronic pain. They prefer to understand their chronic pain on their own terms, in ways that make sense to them. Whether it is a treatment suggestion from a friend, a medical diagnosis or a therapeutic approach, they tend to first learn about it in order to make an informed decision on whether or not to trust it. At times, their evaluation of their healthcare providers’ conclusions and approaches are negative, in which case they may try to take control by seeking alternatives. On other occasions, however, their judgement is that the services they receive are beneficial, in which case they would keenly embrace them into their lives. In addition, ICs’ evaluative thinking has led to strong opinions about Western medicine and the Canadian healthcare system. These opinions, in turn, seem to contribute to ICs’ preference to rely on themselves to management their own pain.
Assumptions and Beliefs Underlying the Criticalness

Data in the current study have thus far painted an image of the IC as a critical healthcare consumer. Not only do ICs analyze their own symptoms and evaluate suggestions by lay individuals, they question the opinions of healthcare providers. The current section describes underlying beliefs and assumptions that seem to motivate their criticalness.

**We Need to Find Out the Root Cause.** ICs seem to believe that pain always has a root cause, and that it needs to be identified in order to be properly treated. As Liang (04) noted, “If you know the answer, and you know its cause, then you can find out what the trigger is. If you can avoid the trigger, then it can improve your pain problem.” Li (16), whose pain is less pervasive than that of Liang’s, also expresses a desire to understand the cause of his pain in order to self-manage. He stated, “I feel that if I know the cause of the pain, and then I know that if the pain worsens, I can alleviate it. If I know this type of thing then I could think of ways to adjust it on my own.”

Some ICs with severe levels of pain view diagnostic scans as a way to clearly see the source of the issue. Therefore, when they cannot access them, they feel frustrated. Jack described an incident in which he was denied a scan by a physician. He recalled, “I asked if I need an X-Ray to investigate the problem, and they said ‘you didn’t have…any external injury, why would you need the scan,’ but, you don’t know the inner workings of the body, right?” Like Jack, Connie (23), also sought physician approval for a diagnostic scan for her arm. When discussing why it was so important to her, she noted, “you can only treat it if you understand the cause, right?” When reflecting on her opinion about Western physicians, she stated:
How I feel is um most of the time, doctors cannot do anything except for you know, help you with the pain, but they don’t want to know what’s the reason causing the pain. They don’t care about the reason.

A few participants appear to have their own theories about what causes their chronic pain. They seem to draw from their understanding of Chinese medicinal concepts, such as the notion that pain is due to blockage in blood flow. As Shao (06), a woman with chronic knee pain noted, “If there is no flow, there will be pain. I believe in that.” Bob (14) seems to have adopted this theory in thinking about his own pain. He stated:

Let’s say you lift 10 pounds, no problem, 20 pounds, can do. But 30 pounds, 50 pounds, that would put pressure on your, blocking your blood, blocking the normal functioning of your muscles, right. There would be pain. It’s a simple principle.

Another theory that is subscribed by some participants is the idea that pain stems from a problem in the kidneys. Feng (17) explained this concept:

Chinese medicine states that the kidneys are responsible for the bones. They affect skeletal health... Of course, I don’t know the mechanism, but for example, it says something like the qi governs something, the blood governs something, etc., the kidneys influence problems with our skeletal system.

Janet (01) is an example of someone who believes that her pain is related to her kidneys. She stated, “My low back pain must be related to the medication I am taking... I feel that my kidneys are a bit damaged, and therefore leading to some pain here. I feel that is the reason.” ICs’ knowledge of Chinese explanations of pain such as the ones endorsed by Shao, Bob, Feng, and Janet may contribute to their skepticism about Western medicine. This skepticism and the desire
to know are further illustrated by Emily (24), who seemed to believe that her physician might be under diagnosing her hand pain. She said:

“When there is no flow, there is pain” right? Everybody knows that...I want to know where the blockage is...my blood vessel here, if it’s blocked, or slowed down, then I have pain... If it’s blocked here [pointing to parts of her forearm], it’s blocked here, it’s blocked here, then (the blood) will be slowed down. Once it’s slowed down, there will be pain. I need to investigate which section is problematic.

Based on comments made by Jane, Shao, Yue, Feng, Janet and Emily, ICs believe that chronic pain may signify deeply-rooted problems and may be under-diagnosed by their physicians. ICs’ conviction that it is necessary to find the root cause of the chronic pain in order to properly treat it likely contributes to their disappointment when a clear diagnosis or a referral for a scan is not forthcoming from their physicians.

*We Had Easier Access in China.* In addition to beliefs about pain and values about health, ICs also carry with them memories of seeking healthcare in China. The CIPMIC Theory states that these memories may have shaped ICs’ expectations about the healthcare provided in Canada, contributing to their criticisms about local healthcare services.

One characteristic of healthcare seeking in China as remembered by ICs is the accessibility of diagnostic tests. Donald (15), for example, mentioned, “If you go back to China… for example, if I go to the hospital, I just need to wait half an hour to get any kind of examination, even if it’s an MRI or a gastroscopy.” Similarly, Emily (24), described how a doctor in China would react to a patient seeking treatment for a health problem:
In China, “oh this (problem), I can refer you to this department.” After you finish this one and that one, if you think you still have a problem, quickly refer you to another department. “Go do it. Go do these few (tests)”

Another apparent difference is that, unlike in Canada, family doctors are uncommon in China, much less being a first stop when one experiences a health concern, such as chronic pain. As Rong (19), a Chinese citizen who is visiting family in Canada, stated, “(China) hopes to introduce the general practitioner, one who understands a bit of all kinds of symptoms…I don’t know too much about family doctors.” According to participants, when one wants to see a doctor, one would go directly to a hospital and see a physician of their choice by paying for a number which determines their place in line. Shan (22) noted that “when you go to the hospital you… they require you to get in line to obtain a number, obtaining a number is for you to see whichever (doctor) you would like to see.” Alice (09) also added that “when you go to the clinic front desk to obtain a number, you need to pay.”

It seems that while the healthcare system in China affords patients choice in selecting a specialist, it also places responsibility on them to seek out a doctor who is right for them. For example, as Emily (24) stated, “I’m in a small town. If the hospital there is not good, then I go to Beijing, right? I go to Tiantan Hospital, or, Tong Ren Hospital. I want to see about an ear problem, I go to Tiantan. I want to see about my heart or a stroke, I go to Tiantan Hospital.” Indeed, it seems that patients need to do quite a bit of preparatory work prior to seeing a doctor of their choice. Shan (22), for example, described the following:

*Beforehand, you need to see which one [Ada: that your friends say, which one is a good doctor?] yeah, the hospital itself posts advertisements – this doctor does this, has such and such experience, has such and such award. Then you*
can specifically purchase the number to see them.

Grace (05) shared that finding a good doctor in China sometimes require connections and reciprocating of favours. She seemed to view the requirements as somewhat onerous. She reported the following:

*When you’re in China, for a lot of things, you’d need to find someone to help you, so it’s a hassle. First, you need to find people you know, acquaintances. Then, because over there if you’re looking for something, including doctors, you, go through connections. Then, you need to bring them gifts, and then they will see you, so it’s a hassle.*

Having come from a place in which specialist healthcare is readily accessible given adequate financial resources and social connections, ICs who are well-resourced may find the Canadian system comparatively inaccessible. This sentiment may especially apply to the current participants, the vast majority of whom were gainfully employed in professional fields in China.

In summary, participants in the current study described the healthcare system that they were familiar with while living in China. That system was characterized by ready access of diagnostic examinations such as scans, a lack of general physicians as a first line of care, a high degree of choice for the patient in terms of which specialist to see, an onus on the patient to get informed about various hospitals and specialists, and shorter wait times compared to Canada. For someone coming from China to Canada, receiving healthcare in their new country would likely be quite a novel experience. Discrepancies between the two systems can create dissatisfaction for ICs, contributing to their criticalness as they try to resolve their pain problem.

**A New Belief: I Am My Own Pain Expert**

As ICs diligently seek resolution to their chronic pain, they develop a new perception of
seeing themselves as a pain self-expert. This attitude is particularly evident among ICs who have had several years of trying to resolve their chronic pain, and therefore an abundance of experiences and knowledge. By proactively and self-reliantly attune to their own symptoms, the IC has a wealth of understanding about their ebbs and flows. With years of thinking critically about their own pain and the treatments options available to them, they also seem to develop a sense of competence about their own pain. The gradual development of self-competence can be summarized by the Chinese proverb, *jiu bing cheng yi*, which in English means “with lengthy illness, one becomes a doctor.” Ultimately, their personal growth culminates into a sense of peace and acceptance about the chronic pain. As the beige arrow in Figure 1.3 indicates, the idea that one is an expert of their own pain is a new belief that is constructed through the process of managing pain over a period of time. This new attitude is represented by a raised box labelled “I am my own pain expert” and is located within the larger circular grey region. It is represented as such to show that the new attitude becomes incorporated into the individual’s belief system.

**Figure 1.3**

*Section of Figure 1 Representing the New Attitude, “I am My Own Pain Expert”*

**Having Knowledge of Own Symptoms.** When a person continuously attunes to their pain symptoms and thinks about their cause and nature, they likely feel quite knowledgeable about
their own pain as time passes. This sense of expertise can be seen in the following description by Ruby (10) about her chronic pain, which she has managed for 13 years:

*When the weather is not wet, you feel it’s at 5, 6. Sometimes when it’s at its best, you feel it’s at 3, 4, like that. Like, when it’s sunny and warm, when the weather is dry, it doesn’t hurt as much. Then you, yeah, can feel it. Like right now, like yesterday when it was starting to get dark, wow, like today, it would hurt. Especially like today when it’s cold, it would hurt.*

Billy (13), who has managed daily wrist pain for over two years, also seems to know by now what exacerbates his own pain. He observed, “If I buy 3 or 5 pounds of stuff then no problem. If it’s 10 or 8 pounds, and I go home, wow [Ada: it hurts only afterwards, not while carrying the things] right, not right away, that’s right, it’s after. It’s like a reflex… hurts like crazy, because the next morning when I get up it is especially intolerable.”

In addition to knowing one’s pain symptoms well, participants have also described an expertise about how to address their own chronic pain. Janet (01), for example, explained how she goes about “treating” her own pain when she has a flare-up:

*When it becomes a “5,” I would start to treat (the pain) myself. During the daytime, I go outside, facing the sun, and beat, beat, beat myself like this. Then, the pain is diminished to a “3” or to a level that is within my tolerance.*

Similarly, Donald (15) reported having a set of tried-and-true strategies for managing his pain. He described it as a culmination of years of experience when he said, “right now, it’s been so many years, so I’m used to it. Taking medicine, initially use hot water, acupuncture, cupping, take medicine, etc., and go swimming when I have time.” Grace (05) also described
reaching an insight about what pain management method is effective for her personally after several years. She acknowledged that, “After so many years, I still feel I shouldn’t just passively receive treatment, but rather, to actively exercise.”

**I Know What to do Now.** With time and effort, the pain sufferer develops a sense of competence in managing their own pain. Participants appear to feel that they are becoming their own pain management experts, evidenced by their mentioning of the proverb, “with lengthy illness, one becomes a doctor” (jiu bing cheng yi). Janice (20) used this proverb to describe her own pain management journey: “turns out there really is such thing as ‘with lengthy illness, one becomes a doctor.’” Donald (15) confirmed the existence of such a concept when he said, “it’s so common in China, “with lengthy illness, one becomes a doctor.” When asked if the phrase applies to her pain management experience, Liang (04) denied seeing herself as a doctor, per se, but did feel that she was becoming quite the expert in her own personal chronic pain. She explained in the following:

> *From my perspective, I can’t be a doctor. I just think that I understand my own illness more than anyone else, even more than my family doctor, and more than the pain specialist.*

**Pain May Never Get Resolved, and That’s Okay.** Despite looking for the root cause of the chronic pain, cautiously seeking long-term solutions, and proactively trying out various different treatments, none of the participants reported being actually able to reach full resolution to their pain. Janet (01), for example, believes that with her low back pain, “to get better in the future, it’s unlikely.” Li (16) also believes that his pain would continue in the future: “I feel that it will continue, although worsen, maybe not.” Ming (03), on the other hand, believes that her chronic pain “might get worse and worse, because the health deteriorates with age.”
The CIPMIC Theory claims that, although ICs do not necessarily achieve recovery from their chronic pain, they do, over time, gain some degree of acceptance about their pain. As Li (16) explains, “I know in the future it wouldn’t be good, it could turn that way. That’s just a normal person’s life. But I am open-minded. I can accept this.” Mandy (21) also seems to be at peace with the notion that her chronic pain may never be resolved. She said, “This problem… sometimes I think, some things first of all may not have a solution. Then, all you can do is to accept.”

Some ICs reflected back on their pain journey thus far and expressed a certain equanimity and wisdom about pain. For example, Liang (04) and Alice (09) described their new insight following years of pain management:

Liang: My pain is 24/7. I cannot neglect it. It has become a part of my life...I’m not like how I was at the beginning when I didn’t understand, I didn’t understand why I was in pain, so everyday I would grapple, “why am I in pain? Why do I hurt? And why is this area hurting more and more? So I no longer struggle with it. I know that pain is normal. For me, pain is a normal thing.

Alice: No matter what I do, the pain will still be there, so I cannot control it...I accept it now. Now, whenever there is a new pain problem, I wouldn’t think, “oh no, what’s going on?” If I have a new pain, I would think, “oh this area has a problem, oh, that’s normal. I’ll just let it go. After a while it might go away.” That’s my attitude now.

Taken together, it seems that the persistent and active search for a resolution to chronic pain results in a wealth of knowledge and insights. Over time, with trials and tribulations, ICs
who find themselves grappling with pain for many years become their own pain experts. Although they may not achieve the cure that they had hoped for, their efforts have allowed them to gain a sense of peace and acceptance about their chronic pain.

**Summary**

In summary, the Culturally Informed Pain Management among Immigrants from China (CIPMIC) Theory stipulates that immigrants from China (ICs) manage chronic musculoskeletal pain through diligently and carefully seeking resolution to their pain. A commonality that they share is a preference to be cautious and self-reliant when managing chronic pain, although ICs experiencing different levels of pain bothersomeness vary in how much they can benefit from this ideal manner of coping. According to CIPMIC, Chinese immigrants’ approaches to managing pain are influenced partly by their pain severity and by their underlying cultural beliefs and values.

In regards to cautiousness, ICs feel the need to be vigilant while managing their pain (e.g., trying to keep exercises well within one’s physical limits), as they believe that they have a duty to take care of their own health. They see physical health as precious and something that ought to be protected. They also feel that medical interventions, such as pain medications, ought to be minimized because it is unnecessary and potentially harmful. For those with mild pain, these preferences are easy to put into action. For those with severe pain problems, however, they are less able to adhere to self-help, familiar, and non-medical strategies and instead require Western medical interventions such as analgesics, physiotherapy, and specialist services.

CIPMIC also states that self-reliance in managing pain is important for ICs. They avoid expressing distress to loved ones for fear of worrying them. They believe that their chronic pain, whether mild or severe, is not such a major problem that it would warrant burdening friends and
family. For ICs with highly bothersome pain, however, keeping one’s pain concerns to oneself becomes more difficult, and the tendency to self-express and to seek support becomes stronger.

According to CIPMIC, what motivates ICs to strive for self-reliance in their pain management is a valuing of courage and fortitude when one is facing adversity and suffering. They see themselves as being solely responsible for their own pain problem, and expect themselves to deal with it effectively, independently, and quietly. The CIPMIC further states that ICs’ ideas about courage and fortitude have stemmed in part from their upbringing in China.

For ICs who feel strongly bothered by their pain, they take a more proactive, help-seeking approach in managing their pain. They try to do so by acquiring their own knowledge through reading, sharing pain management tips with others, and actively searching for new treatments. Their proactive approach seems to be motivated by a desire to maintain positivity and hopefulness. From their perspective, as they actively engage in solution seeking, they develop an expectation that change in their pain symptoms is possible, which helps renew their sense of hope.

In addition to being cautious, self-reliant, and proactive, ICs tend to be critical and evaluative about the pain-related information and treatment approaches they encounter. Rather than taking information at face value, ICs first conduct their own research on these methods prior to deciding on whether or not to adopt them. Their skepticism also applies to opinions given by healthcare professionals. In fact, ICs have developed some negative opinions about the Canadian healthcare system. Specifically, they feel that the Canadian system does a mediocre job of providing timely specialist services and that Western medicine has limited ability to treat chronic pain. These criticisms seem to be motivated by a belief that pain always has a specific
cause, and that identifying the cause is key to resolving the pain. Their dissatisfaction also may be influenced by previous experiences of accessing specialists in China with relative ease.

Finally, according to CIPMIC, the IC’s process of diligently seeking resolution to their chronic pain culminates into a new sense of self-efficacy and acceptance about their pain. Specifically, they become acutely attuned to their own pain symptoms, confident about their own capacity to manage the pain, and at peace with the idea that their pain may be incurable. Believing in their ability to manage their own pain and accepting the permanence of their pain, they take on an identity of being a pain self-expert.

CIPMIC: A Tentative Theory

The CIPMIC is a theory that is “situated in one particular situational context” (Strauss & Corbin, 1990, p.174). It explains the process of managing chronic musculoskeletal pain among adults within a specific social context – having been born and brought up in Mainland China and now living in Metro Vancouver, Canada. It is important to reiterate that CIPMIC is constructed from the author’s perspective and is therefore inevitably subjective. As well, given the ever-changing and dynamic quality of culture, it is inevitable that ideas, beliefs, and values that are accessed by the current study would shift through time. Even as the current research report is being written, ICs a group are likely experiencing shifts in their social, political, economic and physical environment. These shifts, in turn, lead to new ways of looking at the world and adapting to the environment. Hence, culture continues to be constructed and changed, and CIPMIC, as a theory that offers understanding about culture and pain management, is also tentative and open to revision.
Chapter 5: Discussion

As previously outlined in Chapter 2, a significant body of literature (Bates et al., 1993; Bates & Rankin-Hill, 1994; Edwards et al., 2005; Fillingim et al., 2002; Hooten et al., 2012; Hsieh et al., 2010, 2011; McCracken et al., 2001; Watson et al., 2005) has identified a relationship between one’s cultural background and their pain experiences and coping. The nature, quality, and mechanism of the influence of ethnic culture on pain, however, have remained largely unknown (Leung, 2012). The current study is one of the few available that make a dedicated effort in understanding the pain and culture link in a holistic and contextualized manner (For other examples, see Kodiath & Kodiath, 1992, Lin et al., 2013, and Rogers & Allison, 2004). It has employed a grounded theory approach to gather socially meaningful information about chronic musculoskeletal pain among Chinese immigrants and to construct a theory about how they manage the pain.

Results show that immigrants from China (ICs) prefer to manage pain by trying to identify and address the root cause. This process, which I have labelled Culturally Informed Pain Management among Immigrants from China (CIPMIC), involves a careful and agentic manner of searching for a long-term solution for one’s chronic pain. At the behavioural and action level, the pain management process of an IC involves relying on one’s own intuition, diligence, and critical thinking in gathering information and seeking understanding over a topic (i.e., managing one’s own pain). Moreover, as the pain issue becomes more distressing, an IC seems to become more motivated in engaging in this active and thoughtful process. As one continues the process of proactively and cautiously seeking resolution to their pain while relying on their own cultural common sense and knowledge, they seem to reach a state in which they have gained a significant level of mastery over managing their own pain, regarding themselves
as an informal pain self-expert. What does not necessarily get observed on the outset but appears to be relevant to the IC is the unspoken influence of their cultural beliefs on their pain management behaviours. These underlying beliefs, as outlined by the CIPMIC, pertain to the preciousness of health, the moral meaning of facing pain and suffering, a common-sense about chronic pain symptoms, and assumptions about how healthcare services ought to be delivered. While some of the actions, preferences, beliefs, and assumptions expressed by participants of the current study seem unique to this cultural group, others appear to overlap with Western evidence-based clinical practice, which favours an approach of enhancing behavioural skills, developing adaptive thinking, and optimizing daily functioning (National Institute for Health and Care Excellence, 2020). One interesting outcome from the current study, therefore, is that immigrants from mainland China, while coming from a socio-cultural context that is distinct from the culture of Western medicine, do share some similar ideas and meanings with the local healthcare system in Canada.

The purpose of the current chapter is to provide a discussion about the theoretical and practical implications of the study. First, I compare the theoretical framework, Culturally Informed Pain Management among Immigrants from China (CIPMIC), with the relevant extant literature in order to identify any contributions made by the current study. Following these comparisons, a discussion about the usefulness of CIPMIC to the application of the biopsychosocial model of pain management is provided. In addition, the clinical implications of the CIPMIC framework are presented. Finally, I reflect on the limitations of the current study.

**CIPMIC and the Extant Literature**

To evaluate whether CIPMIC adds knowledge to the field, I compared the findings from the current study with knowledge that is documented in the existing literature (Charmaz, 2006).
Specifically, I conducted a focused literature review to search for CIPMIC-related concepts in published studies that have a similar topic (i.e., pain management among Chinese immigrants). This search revealed that some aspects of the CIPMIC are not entirely new, as other studies have documented similar concepts and processes. These overlapping pieces of knowledge include: the Chinese-informed belief that pain is due to blocked circulation, the Chinese value that being self-reliant when facing pain and adversity is a virtue, the preference of conservative and familiar health management methods among Chinese immigrants, and their dissatisfaction with Western approaches to treating pain. The focused literature search also revealed that two of the pain coping constructs that are well-established in the literature, namely, health locus of control (Wallston, 2005) and pain catastrophizing, (Sullivan et al., 1995) are, in turn, evident in the CIPMIC theoretical framework. The current section discusses how these concepts are present in both CIPMIC and the extant literature and how CIPMIC might serve to extend, challenge, or densify these concepts.

**Chinese-informed Health Management**

In order to identify in the literature concepts that are reminiscent of the findings in CIMPIC, I reviewed 14 published studies that appear to be highly relevant to the current research topic. These include four studies on chronic pain (Au et al., 2014; Re et al., 2017; Xiong et al., 2011; Zhang & Verhoef, 2002), four on acute pain (i.e., cancer pain, Liu et al., 2018 and Xu et al., 2019; post-operative fracture pain, Wong & Chan, 2008; burn injury pain, Yuxiang et al., 2012), four on management of general health and chronic conditions (Chun et al., 2011; Kong & Hsieh, 2012; Liu et al., 2014; Wang et al., 2008), and two on pain beliefs in Chinese individuals (Tu, 1987; Wong et al., 2011). Between these studies and the CIPMIC, several points of similarities are identified.
Preference for Conservative Treatments. One theme that is identified by both the CIPMIC and other studies is that immigrants from China prefer to use conservative methods, such as medicated ointments, guarding, and rest, to solve their health issues and to turn to Western medical treatment only when they feel unable to manage with these methods. Zhang and Verhoef (2002), for example, reported a tendency for Chinese immigrants to initially manage arthritic pain on their own and to consider Western medical interventions only with more severe forms of arthritis (Zhang & Verhoef, 2002). This tendency to rely on self-management for milder problems and to move towards Western medicine for more severe problems was similar to what was found in the CIPMIC. The process described in the CIPMIC, however, is presented in more explicit terms and with richer cultural meaning. For example, the preference for conservative treatments is explained in relation to ICs’ cultural beliefs about pain, such as the idea that the body has the ability to heal itself from musculoskeletal injuries.

Circulatory Blockage as a Cause of Pain. Another finding that is shared by the CIPMIC framework and extant literature is the traditional Chinese belief is that chronic pain is due to a blockage in blood or energy flow. According to existing theoretical works on traditional Chinese medicine (Chen et al., 2008; Tu, 1987; Xiong et al., 2011), the notion that pain is caused by blockage in circulation originates from a set of Taoist beliefs about the importance of balance (Chen et al., 2008; Tu, 1987). A part of this belief system is the idea that the appropriate treatment for chronic pain is to release the blockage and restore balance of energies through techniques such as acupuncture and herbal medicines (Chen et al., 2008; Tu, 1987). Although the CIPMIC did not include discussions about uses of acupuncture and herbal medicine, per se, it did identify the concept, if there is pain, there is no flow, from within the data. What CIPMIC seems to contribute is social meaning surrounding the idea of pain and blockage. Specifically,
CIPMIC theorizes that the belief that pain is due to blockage or stagnation of blood or energy flow motivates the IC to diligently search for the root cause of their pain (e.g., to find out the site of the blockage) and to feel disappointed in Western medical doctors when they do not seem to be able to find the source problem that is causing their chronic pain.

**Valuing Self-reliance.** Another concept in CIPMIC that is also documented in other studies is the idea that one ought to be self-sufficient and courageous when facing health problems. For example, qualitative studies of how elderly Chinese immigrants manage their health found that they tend to downplay their health issues and opt for treatments that they are familiar with (e.g., traditional Chinese medicine) so that they would not need their adult children’s assistance (Kong & Hsieh, 2012; Liu et al., 2014). Also documenting a theme of self-reliance is a qualitative study on Chinese immigrant women living in Italy, who showed reluctance in confiding in their family about their pain for fear of burdening them (Re et al., 2017). Similarly, a study on burn patients living in China found that participants try to be a “good patient” by avoiding asking hospital nurses for analgesics (Yuxiang et al., 2012). Even Chinese people with cancer, who reported feeling overwhelmed by the pain and hopeless about their future (Xu et al., 2019), expressed a belief that it is important for a Chinese person to “be brave by enduring the pain” (Liu et al., 2018, p. 511). The importance of self-reliance when dealing with pain is also noted in theoretical works about Chinese culture. As Tu (1987) explained, the traditional Chinese perspective regards pain as an inherently human experience and that bearing with pain in solitude can enrich the person’s level of sensitivity and empathy. Consistent with theory, a factor analytic study has found that Hong Kong Chinese adults living with chronic pain hold pain beliefs that entail self-blame and personal responsibility (Wong et al., 2011). Taken together, the Chinese-informed notion that one ought to be strong and courageous when facing pain is evident
in both the current study and the existing literature. What the current study uniquely illustrates is a relationship between this cultural valuing of self-reliance and the Chinese immigrant’s reluctance to confide in their spouses, parents, and friends about their pain difficulties.

**Dissatisfaction with Western Medicine.** One final theme that is evident in both the CIPMIC and other studies is that immigrants from China desire a definitive diagnosis and a cure for their pain. According to the CIPMIC, immigrants from China (IC) are disappointed when Western medical doctors recommend analgesics without promises of a cure. Their criticism of Western medicine appears to be that it provides only Band-Aid solutions for chronic pain (zhi biao bu zhi ben). A review of the literature shows that IC’s criticism of Western medicine is well-documented and that it is not limited to the treatment of musculoskeletal pain, but to health management in general. In a grounded theory study, for example, Liu et al., (2014) found that elderly Chinese immigrants living in the U.K. prefer traditional Chinese medicine (TCM) over Western medical care due to a perception that the latter only decreases symptoms, while the former can address root causes of illness. This theme was also observed among Hong Kong Chinese elderly with orofacial pain, who reported avoiding pain medications due to its inability to cure illnesses (Au et al., 2014). Furthermore, it is previously shown that Chinese immigrants living in Toronto prefer not to seek help from family doctors for general ailments because, like the participants in the current study, they believe that Western medicine is merely symptoms-focused while TCM addresses illnesses at its root (Wang et al., 2008).

A related theme that is evident in both CIPMIC and the extant literature is the IC’s perception that Western medicine can potentially do more harm than good. Consistent with CIPMIC, several studies documented a concern among Chinese immigrants that Western medications can cause damage to the body (Au et al., 2014; Liu et al., 2018; Wong & Chan,
Specifically, studies identified a cultural belief that Western medications are more “invasive” for the body (Liu et al., 2014, p. 7) whereas TCM methods like ointments are “safer” for the body (Wang et al., 2008, p. 1418). Furthermore, like CIPMIC, several studies showed a pervading thought among Chinese patients that taking analgesic medications are only warranted for unbearable, distressing pain and emergency situations (Au et al., 2014; Re et al., 2017; Zhang & Verhoef, 2002), such as acute post-operative pain (Wong & Chan, 2008), cancer pain (Liu et al., 2014; Xu et al., 2019), or pain from burn wounds (Yuxiang et al., 2012). Where these study results and the findings within CIPMIC differ is that CIPMIC places ICs’ negative perception about Western medicine within a larger picture of socio-cultural meanings. Specifically, it demonstrates that ICs’ views about Western medicine motivate them to question the decisions of their healthcare providers, and that they are informed partly by a general cautiousness and dedication towards protecting their own health. Data from the current study also suggest that IC’s reluctance in engaging in interventions is not limited to only Western pharmacological therapy, but treatments that they subjectively perceive as invasive. As participants, John and Janet indicated (see Chapter 4, subsection Minimize Interventions: Less is More), TCM treatments such as acupuncture and cupping may also be seen as unsafe and ought to be avoided. CIPMIC, therefore, seems to show that ICs’ judiciousness about treatments is not based merely on the discrimination between TCM and Western medicine, but a subjective view of whether a treatment is invasive.

In summary, a review of the literature on Chinese chronic pain management shows conceptual overlap between the CIPMIC and existing knowledge. Specifically, both the CIPMIC and the extant literature demonstrate that Chinese immigrants manage their health cautiously by choosing treatments that are conservative and minimalistic. As well, both sets of
knowledge indicate that bearing with pain one’s own has moral meanings for Chinese individuals. Finally, both CIPMIC and existing studies suggest that Chinese immigrants are dissatisfied with Western medicine due to a perception that it only addresses symptoms and can cause bodily harm. Although CIPMIC did not introduce these ideas to the literature, as they were already present, it has densified them by placing them in a context of cultural values and pain coping actions.

**Established Constructs of Pain Coping**

In addition to extending findings and concepts that are relevant to the Chinese immigrant cultural group, CIPMIC also seems to contribute cultural meanings to two constructs of pain coping pertaining to the general population. These include internal health locus of control (Lefcourt & Davidson-Katz, 1991; Norman et al., 1998; Strickland, 1978; Wallston, 2005; Wallston & Wallston, 1982) and pain catastrophizing (Sullivan, 2012; Sullivan et al., 1995, 1998).

**Internal Health Locus of Control.** Locus of control is a psychological construct that is well-established in the health management literature, and refers to the level of control and influence that a person believes an internal or external source has over their own outcome (Rotter, 1992). Whereas someone with an internal health locus of control perceive that their own capabilities and personal qualities have a high degree of influence over their own health outcomes, someone with an external health locus of control tend to regard external factors such as fate and the actions of others as having a high level of influence over their own health (Wallston & Wallston, 1982). A high internal health locus of control is associated with a greater display of responsibility in one’s own health management and a higher level of engagement in active coping and health-enhancing behaviours, such as exercising regularly and eating healthy (Steptoe & Wardle, 2001; Strickland,
Research also suggests that adults with chronic pain are less likely to experience depression if they are also high in internal locus of control (Campbell et al., 2017). Quantitative and deductive investigations show that the concept of locus of control is relevant to individuals across many countries (Steptoe & Wardle, 2001), with some ethnic groups reporting higher levels of internal or external locus of control than others (Bates et al., 1993; Bates & Rankin-Hill, 1994; Wrightson & Wardle, 1997). This construct is shown to be relevant to Chinese people with chronic pain, among whom higher levels of internal locus of control is related to lower levels of disability (Cheng & Leung, 2000).

Although not an explicit focus of the current study, health locus of control appears to be a relevant concept within the currently constructed CIPMIC. According to this framework, ICs conscientiously protect their own health by opting for low risk pain management strategies and avoiding potentially harmful ones. They may, for example, limit their exposure to negative drug side effects by abstaining from taking analgesic medications altogether, even at the expense of relief and comfort. This dedication to protecting one’s own health suggests that they are expecting their own actions to have a strong influence over their own pain outcomes, which is the definition of a high internal health locus of control (Wallston & Wallston, 1982). Consistent with what is known about internal locus of control and mood (Campbell et al., 2017), ICs in the current study find that proactively seeking solutions helps them stave off low mood and hopelessness. This process was exemplified by Shan’s (22) comment, “When I reflect on why I didn’t get depressed, I think it’s because I take action, I try to look for solutions. When I do that, I have hope.”

It appears that the current study, by inductively constructing concepts based on data, has provided qualitative cultural information about the concept of internal health locus of control.
Specifically, it shows that a high internal health locus of control may be a part of a Chinese cultural value regarding taking personal responsibility and being self-reliant in managing health. Moreover the CIPMIC concept that proactiveness reinforces hopefulness is consistent with research findings about the positive impact of internal locus of control and mood and functioning (Campbell et al., 2017; Cheng & Leung, 2000; Wallston & Wallston, 1982), thus adding construct validity to the concept of health locus of control.

**Pain Catastrophizing.** Another construct that the CIPMIC framework seems to suggest is pain catastrophizing, or the tendency to expect negative outcomes of pain and to exaggerate the awfulness of the outcome in one’s own mind (Sullivan et al., 1995, 1998). Specifically, it challenges existing findings about pain catastrophizing among adults of Chinese cultural background. A study by Hsieh and colleagues (2010) has found that Chinese-Canadian young adults reported higher levels of pain catastrophizing prior to a laboratory induced pain task, showed less pain tolerance during a laboratory stimulus, and reported greater affective distress following the pain task when compared with their European-Canadian counterparts. The current study, however, found that adult immigrants from mainland China report a set of thoughts and behaviours that indicate low pain catastrophizing, which is somewhat unexpected given Hsieh et al.’s (2010) results. Specifically, Chinese immigrants in the current study described a tendency to minimize their pain by choosing to view it as mild and undisruptive, within their range of tolerance, or as participants, John and Emily, would say, only “a small matter.” As well, they perceive a high degree of personal control over their own pain (i.e., a high internal locus of control), which is also associated with lower catastrophizing tendencies (Cheng & Leung, 2000). Furthermore, ICs in the current study did not engage in much magnification or regard themselves
as helpless about their chronic pain, which is indicative of a low, rather than high, level of pain catastrophizing (Sullivan et al., 1995).

On the outset, the CIPMIC seems to contradict what little is known about Chinese culture and pain catastrophizing. A closer look at the two studies, however, suggests that a possible explanation lies in the difference in population sampled. Specifically, while Hsieh et al. (2010) investigated Chinese-Canadians who were 17 to 27 years old, the current study interviewed Chinese immigrants who were 41 to 70 years of age, hence each sampling distinct generational cohorts. Each of these two cohorts have likely lived through different social, economic, and historical events in Asia and therefore may hold different values on ways of being (Yi et al., 2010). A statement from participant, Jane, seems to support this hypothesis:

Those of us from the 60s, our thinking tends to be conservative and we place individual interests in the lowest priority and place the needs of the family, of the country, and society’s interests at the forefront...There was no thought about how to pursue personal happiness. Really, it’s different from the 80s and the 90s.

Although in this quote, Jane was referring to general differences regarding social responsibility, rather than pain, what the CIPMIC has shown is that values such as social responsibility and self-conduct can also have influence on one’s pain management behaviours. It is therefore not inconceivable that any generational differences observed between those born in their 60s and those born in the 80s and 90s to be reflective of potential differences in values about social displays of pain. Generational differences in pain catastrophizing may also be possible due to differences in life experience. For example, several participants attributed their nonchalance about their pain problem to their older age and life experiences, noting that physical
pain becomes less significant in the context of other life challenges. It is therefore possible that the relatively high scores on catastrophizing and low pain tolerance exhibited by the Chinese-Canadian university students in Hsieh et al. (2010) are due in part to generational differences in cultural upbringing and life experiences. This hypothesis warrants further investigation. Regardless of the outcome of this future effort, the current findings within CIPMIC provide an alternative perspective about pain catastrophizing among Chinese immigrants, thereby adding further complexity to this construct.

In summary, the CIPMIC framework appears to map consistently onto the nomological network of chronic pain management. The fact that the concepts constructed inductively by the current study are reminiscent of internal health locus of control (Wallston, 2005) and pain catastrophizing (Sullivan et al., 1995), suggests that CIPMIC contributes to the ecological validity and cultural complexity of these constructs.

**CIPMIC and the Biopsychosocial Model of Pain**

The biopsychosocial model of pain (Gatchel et al., 1995; Gatchel, 2005; Turk & Monarch, 2002) is a widely researched theoretical framework that explains the development and experience of chronic pain. It provides the theoretical basis for psychosocial and multidisciplinary interventions for chronic musculoskeletal pain (Sullivan, et al., 2012). In light of the ubiquity of the model within the chronic pain literature (Kertay & Pendergrass, 2008; Schultz et al., 2005) and its utility for healthcare practitioners (Kamper et al., 2014), research efforts that can further enhance the model’s use would be beneficial to the field. In the current section, I reflect on how the CPMIC framework relates or contributes to the biopsychosocial model of pain and propose the addition of a cultural component to its main tenets.
The biopsychosocial model of pain is a framework explaining how one’s pain experience can evolve over time from being a musculoskeletal injury to a condition of complex, intractable, and emotionally distressing pain (Gatchel et al., 1995). It theorizes about the influence of ethnic culture on pain management on a broad level by highlighting the notion that one’s social history influences one’s experience of pain (Gatchel et al., 2007). It provides an explanation about individual differences in subjective experiences of and behavioural responses to chronic pain, allowing for the prediction of future coping and adjustment following musculoskeletal injury (Gross et al., 2016; Loisel & Côté, 2013).

As discussed in the literature review in Chapter 2, this theoretical claim is bolstered by an array of evidence on ethnic cultural differences in chronic pain experiences and coping (e.g., Bates & Rankin-Hill, 1994; Edwards et al., 2005; Fillingim et al., 2002; Hsieh et al., 2010). These studies tend to express a positivist view of culture and to test hypotheses about culture and pain that are deductively derived from existing theory. In regards to research methods, they rely primarily on quantitative measures of culture and statistical methods of analyses. Consequently, the evidence they generate about a culture and pain are in the form of broad trends (e.g., statistically significant difference in pain response between two ethnic groups) rather than rich qualitative details of cultural phenomena (Kirmayer, 2012). As well, much of the research within the biopsychosocial model of pain literature takes on an etic approach of studying culture, in which the researcher aims to identify universal processes by examining a cultural group from an objective outsider’s perspective (Canino et al., 1997; Ponterotto, 2005).

As discussed in Chapter 2 and briefly mentioned in the current chapter, quantitative and deductive approaches to studying culture are disadvantaged, as they are unable to access ethnic culture in its complex, contextualized, and meaningful form. In contrast, studies taking on an
emic approach examine the social phenomenon from the individuals’ perspective by taking steps to ensure that their thoughts and experiences are represented as fully as possible (Brewer, 2000; Canino et al., 1997). An emic approach to studying culture and health is largely found in medical anthropology (Kamat, 2009; Kleinman, 1980) and sociology (Flick, 2003), but less so in the fields of behavioural science and clinical psychology (e.g., Craig, 2009; Edwards et al., 2005; Hsieh et al., 2010). Following the traditions of anthropology and sociology, the current study uses an emic approach to understand how musculoskeletal pain is managed within an ethnic culture. In doing so, it contributes a social constructionist voice to a body of literature (i.e., the biopsychosocial model of pain literature) that is predominantly positivist (Harding et al., 2005). Additionally, because cultural concepts in the current study are generated from the perspective of the patient, as opposed to the researcher, any measurement tools or practice strategies derived from the data are likely culturally relevant and clinically useful (Henschke et al., 2016). I believe that current study serves as a bridge between the positivist fields of behavioural science, clinical psychology, and experimental psychology and the social constructionist disciplines of anthropology and sociology, and in doing so enriching the practice of the former.

The CIPMIC framework also contributes towards the biopsychosocial model of pain by highlighting “cultural” considerations, thereby adding to the biopsychosociocultural model (Hilty, 2015). Interest in this broadened version of the biopsychosocial model is evident in recent works by scholars who conceptualize health management from a socioecological perspective (Chung et al., 2018; Lehman et al., 2017; Loisel & Côté, 2013; Meints et al., 2019). Meintz (2019), for example, discussed the importance of considering societal and contextual factors when understanding a patient’s coping of chronic pain, including macro-level issues such as discrimination and access problems in the healthcare system and differences in health beliefs
between patients and providers. Similarly, Loisel and colleagues (Loisel et al., 2001; Loisel & Côté, 2013) have highlighted the importance of institutional influences, including compensation systems, workplace procedures, and healthcare approaches, on a person’s development and maintenance of work disability. What the current study provides is enrichment of a subset of the socioecological and the biopsychosociocultural models by showing how the patient’s cultural context influences their beliefs, expectations, and management of chronic pain.

Additionally, the CIPMIC theory also adds cultural concepts of pain management that may be used to formulate a contextualized understanding of the patient’s pain experience and associated behaviours. These cultural concepts include beliefs about the nature of pain, perceptions about the effectiveness of treatments, values underlying pain and suffering, sense of autonomy and control when handling pain, tendencies to minimize or catastrophize, opinions about pain management approaches, and perceived differences between the healthcare system in one’s home country and that of the host country. To be sure, because these concepts were constructed from data about Chinese immigrants specifically, they may not be similarly relevant to other cultural groups. Therefore, they ought to serve as starting points for further inquiry rather than established components of the cultural dimension. Additional research on chronic pain in other cultural groups in Canada (e.g., Indigenous people, South Asians) would further the understanding of the beliefs, values, and tendencies underlying their manner of managing chronic pain. An example of this line of inquiry is evident in recent literature on Indigenous groups in Australia, which consist of important results—such as the finding that clinical examinations may have an iatrogenic effect on the Aboriginal patient’s low back pain—that can inform culturally competent clinical practice (Arthur & Rolan, 2019; Lin et al., 2013). There has been a call for similar research for Indigenous groups in Canada, the cultural pain beliefs of
whom is largely unknown despite this population’s greater likelihood of having chronic pain (Julien et al., 2018). Results from these investigations would continue to add richness to the sociocultural dimensions of the biopsychosocial model of pain and allow for the development of culturally relevant assessment instruments of chronic pain.

**Clinical Applications of the CIPMIC**

The construction of a theoretical model that thoroughly explains the pain management process among mainland Chinese immigrants has several practical benefits in the healthcare field. First, it informs practitioners’ work with ethnic minority patients by illustrating how culturally-laden the act of pain management can be and how cultural difference between the provider and the patient can impact the effectiveness of their rehabilitative work together. For example, a difference between the provider’s and the patient’s common-sense understanding of how the body works and what chronic pain actually is can place them at odds with each other in regards to what they see as appropriate treatment.

In addition, CIPMIC can inform clinicians’ work with patients of a Chinese cultural background. The CIPMIC framework, with the central process being seeking resolution to chronic pain, gives insight into the potential reasons for non-compliance or frustrations between Chinese patients of chronic pain and the healthcare provider. What the CIPMIC has shown is that these patients may have an unspoken, under-communicated desire for clear answers to their pain, and possibly an expectation to be able to access specialists without much resistance, as was what they remembered from mainland China. Hence, their insistence on diagnostic scans is unsurprising. As well, Chinese immigrant patients’ tendency to evaluate and question healthcare providers’ recommendations may be a part of a constellation of motives pertaining to caution and personal responsibility. A particularly important finding in the current study is Chinese
immigrants’ perception that TCM can treat chronic pain at the root cause, while Western medicine is only able to address superficial symptoms. From a clinical practice point of view, this could potentially lead to disagreements in the treatment process within the Western healthcare system. Keeping these potential sources of conflict could potentially assist medical practitioners to understand the patients’ needs and to dispel any misunderstandings about Western medical approaches that the patient may be holding.

By illustrating how Chinese people prefer to manage chronic pain, the current study informs practitioners on how to tailor treatment methods to Chinese people (e.g., more educational resources, more efforts to explain the origin of the pain, greater understanding about the Chinese patient’s insistence on diagnostic scans). Knowing that immigrants from China are coming to the clinic wanting long-term solutions and clear answers about their pain would allow the practitioner to tailor their help (e.g., prioritize time on explaining the possible causes of the chronic pain). As well, understanding the patient from a biopsychosociocultural lens would allow a practitioner to consider cultural explanations when their clients show unwillingness to comply with treatment plans.

The finding that Chinese patients have a strong desire for long-term resolution and knowledge about root causes of pain highlights a potential conundrum in treating chronic pain among Chinese individuals – the patient is looking for an answer that does not exist from the perspective of Western medicine. As Geisser et al., (2006) noted, although evidence-based comprehensive pain programs are effective in providing patients with tools to live with chronic musculoskeletal pain, it cannot cure or eliminate the pain. To a chronic pain sufferer, especially one who is hoping for an accurate identification and curing of the underlying “disease,” the realization that comprehensive pain programs can only provide coping strategies is likely
disappointing and frustrating. This finding highlights the importance of sensitive explanations on the healthcare providers’ part—specifically, one that acknowledges the patient’s needs for a cure and the limitations of current Western medical science in meeting that need.

The finding that ICs, after having lived with chronic pain for some time, regard themselves as an expert of their own pain may signal to the practitioner that their acts of encouragement, acknowledgement, and empowerment are welcomed and important for a Chinese immigrant patient. Their lived experience of chronic pain consists of a sense that they have worked hard in managing the pain in a self-reliant, diligent, and courageous manner. An understanding of these efforts and respect for the patient as a self-expert would likely allow the patient to feel validated and connected with the provider.

In contrast to Western medicine, which traditionally regards pain as something that needs to be quickly eliminated (Zborowski, 1969), traditional Chinese thinking seems to consider the experience of pain as character building. Chinese patients’ emphasis on fortitude and self-reliance can potentially facilitate recovery for the individual, as it encourages them to be agentic rather than helpless about their pain, or a hindrance, as it discourages them from seeking medical treatment or benefitting from analgesics. The CIPMIC framework, therefore, may be a useful case example of how a patient’s cultural values can implicate their ability to engage in Western rehabilitative and medical treatments. Cultural competency training for practitioners of physiotherapy, occupational therapy, medicine, and other areas of rehabilitative science may benefit from including evidence-based cultural models such as CIPMIC in their curriculum. A similar recommendation has also been made in regards to enhancing mental health literacy among students in health-related fields. Educators and scholars (e.g., Chao, 2020; Jorm, 2014)
have noted the importance of attending to language and culture when understanding mental health from the perspective of patients and clients.

**Limitations and Future Directions**

The current study aimed to construct social knowledge using a methodology that has been vetted by other scholars (i.e., constructivist grounded theory) while aiming to meet the criteria of a well-conducted study. Nevertheless, from the writer’s perspective, there are points of weakness in the design and execution of the study that warrant acknowledgement.

In regards to the final product of the study, or the CIPMIC framework, despite its breadth and multidimensionality, some processes may also be relevant but are missing. Specifically, the CIPMIC did not contain much information about the IC’s navigation of the Canadian healthcare system (e.g., what was the experience like? How did they balance between being a compliant patient and advocating for what they felt they needed?). Given the degree of frustrations expressed by ICs in the current study, the cultural conflict they encounter when accessing healthcare is likely a relevant problem for them. The process of seeking Western medical care by immigrants from Eastern countries may be a fruitful topic to explore in the future.

One other limitation to the current study is its significant reliance on interview data, which includes, in essence, participants’ reflections, perceptions, and after-the-fact descriptions about their pain management behaviours, rather than a real-time capturing of the participants’ actions. Given that the study is about the process of pain management, more field observations, such as watching participants’ conversations with family members or their participation in physical therapy at a clinic, and incorporation of these observations into the data would enhance the theory’s representativeness of social reality (Kleinman, 1980). As well, varying the data collection method, such as using questionnaires and looking at medical history records, would
lessen the influence of any impression management efforts on the participants’ part (Vangen et al., 2004).

The CIPMIC has contributed little information about the acculturation process among immigrants from China living in Canada. The process of adjusting to living in Canada may involve a mixture of experiences of isolation, integration and acceptance into the local community, and assimilation into the local culture (Berry, 1997). Research that illuminates this complex process among immigrants from China may add to the understanding of how they navigate the Canadian healthcare system as they manage their chronic pain.

Another shortcoming about the current study is the fact that its findings are highly contextualized to a specific population within a specific setting—namely, immigrants from mainland China who have settled in Vancouver, Canada, in the past two decades. The fact that they are a highly educated group living in a city with a high cost of living suggests that they may have distinct social and background experiences as compared with other individuals who had emigrated from China. Therefore, results within the CIPMIC framework cannot be considered directly transferrable to all immigrants from China. Also specific about CIPMIC is that it is a theory about chronic musculoskeletal pain management. Although concepts and ideas are likely relevant at least to some extent to other health concerns, such as diabetes management, applying these findings to other problems would require judiciousness on the reader’s part. The current study aimed to mitigate this problem by increasing transparency about the research process, which would provide the reader with necessary information to judge the findings’ transferability to other populations and contexts. Additional grounded theory studies that investigate the problem in a related context (e.g., chronic pain management among immigrants from Hong Kong;
cancer pain management among immigrants from mainland China) would broaden the scope and transferability of existing theories.
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APPENDIX A

Sample Researcher’s Journal

March 27, 2017: Now, as I’m reading about the attitude of Abduction (which is neither deduction nor induction), which Reichertz (2007) defines as an open attitude of being "prepared to be unprepared," to keep oneself completely open to being surprised by the data by holding no pre-conceived notions about the data at all... I'm now worried that I've not been holding such an open attitude in analyzing my first 5 participants (201, 202, 203, 208). I have this worry because I notice that I'm feeling quite desperate/pressured to come up with something to show Izabela and Richard tomorrow. I keep wondering what the associations/possible causal processes are among the concepts of: Attributing pain to stagnation of blood, attributing pain to mechanical problems, attributing pain to emotional pressure, pain-mood connection, positive attitude and learning, coping resources: friends and family, coping resources: knowledge. After reading the Reichertz article, I'm realizing that I need to back off from wanting to advance any causal processes, and just focus on finding variability within relevant concepts. For example, I'm seeing some variability in a person's expressed desire for "self-doctoring," with 201 and 206 being very strong in their quest for treating themselves, and 202 and 203 being more moderate, and 208 being the most mild in her "self-doctoring" ways. I should just stick with looking for variability (and to see if it is associated with any other concepts), rather than mulling over the data on my own (or ONLY looking at a map of the concepts) and trying to come up possible causal processes.
APPENDIX B

Advertising Pamphlet for Recruiting Study Participants

The UBC Department of Counselling Psychology is now conducting a research study looking at how people of Mainland Chinese background face chronic pain in their daily lives.

Participants must be 18 to 65 years old and are immigrants from China. You will be given $30 in exchange for your time.

If you have pain in one of the following areas:
Lower back, Upper back, Shoulders, Hip, Neck, Knee, Arm, Leg

The pain has lasted 6 weeks or more,

And the pain impacts your daily life and causes major discomfort

Consider participating in our research study.

You will participate in a 1 to 2 hour interview.

We are interested in hearing about how you cope with your chronic pain.

Your confidentiality will be strictly protected.
For more information:

Note: The actual pamphlet is double-sided, with the other side containing a Chinese translation of the currently displayed page.
APPENDIX C

Example of Interview Guides Used at Different Time Points of the Study

Date: August 2016  Participants: #1 to #6
- Your pain history: when, location, treatments sought, course of symptoms
- Your theory of pain: why does it hurt, why do treatments work
- How does pain impact relationships with friends/family?
- Life philosophy that impacts your coping of the pain.
- Prefer Western or Eastern medicine?
- How do you feel about the Canadian healthcare system?

Date: May 2017  Participants: #12 to #19
- Describe your pain history: when, location, treatments sought, symptoms
- Your theory of pain: why does it hurt, why do treatments work?
- How has pain impacted your mood/self-perception?
- Any connection between mood and pain?
- Have you heard of Subhealth?
- How did you learn your health knowledge?
- How do you feel about taking pain killers?
- Do you talk about your pain with friends and family?
- Any problems with integrating into Canadian society?

Date: October 2019  Participants: #22 to #24
- Briefly describe your pain experience when, how severe, treatments
- How well do you feel you understand your pain?
- Any moral values around toughing through the pain?
- Can one be healthy while being in pain?
- Any moral values around depression?
- Does having a diagnosis change your feel about your pain?
APPENDIX D

Consent Form (English Version)

CONSENT FORM

Research Project Title: Exploring the process of managing chronic musculoskeletal pain among immigrants from China

Investigator: Izabela Schultz, PhD, Professor, Department of Educational and Counselling Psychology, and Special Education, (604) 822-5251

Co-Investigator: Ada Law, MA, Doctoral Student, Department of Educational and Counselling Psychology, and Special Education, (604) 822-5251

This research project is part of the requirements for Ada Law’s completion of a doctorate degree. The results of this research will be reported in a doctoral dissertation document which will become accessible for the public through the university library. The results of this research may also be published in academic journals or books, or be presented in professional conferences. This consent form outlines the purposes and procedures of this research project.

STUDY PURPOSE AND POTENTIAL BENEFITS

We want to thoroughly understand how adults of Chinese cultural background cope with pain in their daily lives. We are inviting immigrants from Mainland China who came to Canada as adults and who are experiencing bothersome pain every day or nearly every day to participate in an interview. It is hoped that the information gathered from you, along with those of other participants, would help healthcare providers, such as doctors and physiotherapists, provide more effective care for Chinese patients. The interview is not designed to offer clinical advice or suggest treatment for your condition and is not expected to have any direct benefit to you. However, it is possible that you will gain some useful insights by sharing your experiences and stories with a trained researcher.

ELIGIBILITY

To be eligible to participate, you must:

- Be 18 to 65 years old
- Have emigrated from Mainland China when you were 16 years or older
- Have bothersome pain everyday or almost everyday in your neck, shoulders, arms, legs, back, or hip area
- Have pain for the past 3 months or more
- NOT have other medical conditions that cause major distress or physical impairment
- NOT have a severe mental health condition

STUDY PROCEDURE

If you choose to participate, you will be interviewed by co-investigator, Ada Law, about your experiences in coping with chronic pain. The interview will last 1 to 2 hours and will
(APPENDIX D continued)

take place in a private office (within a medical or office building) within your community. For some people (e.g., because of pain-related mobility problems, lack of access to transportation), it may be very difficult to attend one of our offices. If that is the case, the interview would take place within your home. You will be asked to be interviewed in your identified dominant language (Mandarin, Cantonese, or English). The interview will be audiotaped. In some cases, a professional interpreter will also be present to assist with translation. At a later date, you may be invited for a follow-up interview on topics related to your pain coping experiences.

POTENTIAL RISKS OF THE STUDY
We do not believe there would be anything in this study that could pose harm to you. Nonetheless, some of the questions we ask might bring about upsetting feelings. You do not have to answer questions that you do not feel comfortable with answering. Please let one of the investigators know if you have any concerns. If you feel that you may need further help from a counsellor or a social service provider after the interview, you will be provided with referrals to agencies that fit your needs.

CONFIDENTIALITY
Your privacy will be strictly protected. The information you provide to us will only be shared amongst the investigators and a small team of researchers at UBC. Paper documents containing your personal information and identity will be secured in a locked cabinet and audio-recordings will be stored in password protected computers. Your information will not be shared with anyone else without your written consent. However, at any point in the study, if you express an immediate intention to seriously hurt yourself, please be advised that the researcher must, by law, report this information to the appropriate authorities.

RENUMERATION
As a reward for your participation we will provide you with $30 at the conclusion of the interview.

CONTACT FOR INFORMATION ABOUT THE STUDY
If you have any questions or require more information about this research project, please contact Dr. Izabela Schultz (Principal Investigator) at 604-822-5251 or Ada Law (Co-Investigator) at (604) 822-5251.

CONTACT FOR COMPLAINTS
If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598. For long distance, e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

CONSENT
Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study without providing a reason. It will not impact your eligibility for remuneration.

Your signature below indicates that you have received a copy of this consent form for your own records. It also indicates that you consent to participate in this study.

(Participant Printed Name)        (Date)

(Participant Signature)
APPENDIX E

Consent Form (Chinese Version)

同意书
探索中国移民的疼痛管理慢性肌肉骨骼疼痛过程

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这项研究是罗君颖为取得博士学位所需完成的修业要求之一。研究结果将撰写于她的博士论文中，而完成的博士论文将收藏于大学图书馆供公共参考用途。本研究结果也可能刊载于合适的学术期刊或书籍，或发表于专业研讨会。本同意书概述本研究的目的及程序。

研究目的及潜在得益
我们希望能够深入了解有中国文化背景的成年人在日常生活如何应付日常生活的身体的疼痛。我们邀所有在成年期从中国移民到加拿大并患有长期疼痛的人参与一个访问从你所收集的资料，有希望帮助医疗服务提供者，如医生和物理治疗师，为中国患者提供更有效的服务。访问的目的并不是提供临床建议或治疗，亦不会给您任何直接的好处。然而，透过与训练有素的研究人员分享您的经验和故事，您可能可以获得一些有帮助的启发。

参加资格
参与者必须：
- 18 岁或以上
- 来自中国大陆的移民，而移民时是 16 岁或以上
- 每天或几乎每天都感受到疼痛，在您的脖子、肩膀、手臂、腿部、背部、臀部或地区
(APPENDIX E continued)

- 疼痛维持了三个月或以上
- 没有其他的令身体行动不便或令您心理困扰的疾病
- 没有严重的精神疾病

研究程序
如果您接受我们的邀请，我们会请您接受合作研究者・罗君颖・的一个访问。这访问是关于您的面对长期疼痛的经验。访问将持续1至2个小时在一间私人办公室进行访问。如有必要（例如行动不便），访问可以在您的家中举行。您会被要求用您的主导语言（普通话、粤语或英语）接受采访。访谈将全程录音。在某些情况下，专业的口译员也将到场协助翻译。访谈完毕后，研究员有可能会再联络您，邀请您参加有关你的痛苦经验的后续采访。

潜在风险
我们不认为在进行研究中有任何会对您造成伤害或对您不好的事情。虽然机会不高，但有可能我们问的某些问题会令您感到不安。您不想回答的问题可以不必回答。而如果您有任何疑虑，请告知研究员。如果在访谈后，您觉得您需要接受辅导员或社会服务工作者的进一步协助，我们将提供适合的机构转介资源。

保密说明
您的隐私将受到严格的保护。您提供给我们的资料将只和一组UBC的研究人员之间取看，包含您的个人资料和身份纸质文件将被固定在一个上锁的柜子，而音频记录将被保存在密码保护的电脑。您的信息将不会与任何人未经您的书面同意的人共享。然而，在研究过程中，如果您表达自伤意图，请注意根据法律规定，研究人必须将这样的讯息通告给有关当局。

报酬
为了答谢您参与我们的研究，访谈完毕，我们会给您$30。
研究相关联络人
如果您有任何疑问或需要对这个研究的进一步讯息，您可以联系 Izabela Schultz 博士（主研究者）604-822-5251，或罗君颖（共同研究者）604-822-5251。

投诉管道
如果您在参与这项研究的过程中有任何关于您作为参与者的经历或权利的投诉，请联络 UBC 科研伦理办公室的研究参与者投诉热线 604-822-8598。若是长途可以电邮联系 RSIL@ors.ubc.ca 或免费电话 1-877-822-8598。

同意声明
参加这次研究完全取决于您的意愿。您有权拒绝参加这项研究。如果您决定参加，您可以在任何时候选择退出，且不需要提供理由。退出也不会影响您获取报酬的资格。

下方签名表明您已经收到本同意书的副本以作为个人记录。

您的签名表明您同意参与这项研究。

________________________________
正体书写研究参与者姓名

________________________________
研究参与者签名 日期
APPENDIX F

Example of a Field Note

September 16, 2019

I arrived at Artus in the morning to talk to Sarah the MOA and Dr. ****. Artus has a comfortably set up, welcoming waiting area. Water cooler, cushions specifically set for patients. Friendly MOAs.

I was given an appointment time during Dr. ****'s lunch break. He was very generous to talk to me. He remembers me from a few years ago when I first started doing this research. He recalls me seeing him at ChangePAIN clinic. He asked how many participants have I had that were referred by him, and I said "not sure, maybe one?" And he was very surprised. He said he gave away all of the brochures (I recall I left around 30. His assistant and I were even folding them together in his office). He seemed a bit disappointed by the lack of response. He noted that from his experience, Chinese patients are very reluctant to participate in these studies. He noted that patients ask what's the benefit to them, and seem disinterested when he tells them the benefit, which realistically, is none in terms of their pain management. He believes that $30 is not much of an incentive for Chinese pain patients. He thinks that perhaps if there is something diagnostic I could give them, they might be more interested. I started thinking out loud "I might be able to provide something from a psychology's standpoint, but there may be ethical issues around that..." He immediately shook his head and said that he wouldn't recommend that, as there is a major stigma among Chinese people regarding "psychology" problems. I noted that perhaps I could offer participants a description of my emerging findings, which is very fresh as it hasn't even been presented to my committee yet. He thinks that might be helpful.
At 1:30pm, Xxxxx came with her daughter to her appointment. Dr. **** said that she is willing to talk to me, so I set up a little talking area in a small room space with an opened sliding door. Xxxxx had an accent (I think she speaks Toisan). She said she is from Guangzhou. when I said hello to her, and established that she prefers to talk in Cantonese, she asked right away how I can help her, and what kind of doctor I am. When I told her that I am a student, she seemed disappointed. I then informed her that I am doing research on how Chinese people deal with pain, and that I'm doing this because there is currently very little information about Chinese people. She seemed confused, and also noted that I needed to speak louder. I regretted at that moment not having a more simplified spiel prepared. When I told her that I couldn't help her and that in fact I was hoping to get her help, and that I need to interview people like herself, from China and have pain, and that I need to interview her for an hour, she reacted strongly to that by saying "oh, I'm actually okay now. I don't have pain anymore. I only sometimes have pain right here (showing me her hand). I only came to see this doctor because my doctor told me to. 我好健康 gah, 我日日都出去做運動, 我又打 badminton. 我已經唔痛拉！" I immediately relaxed my approach and just complimented her on how active she was and how healthy she seemed. She then told me that she is in her 80s. She continued to tell me that she doesn't have anything to tell me, and she thanked me. We ended the conversation with lots of pleasantries (me wishing her continued good health, thanking her for talking to me, and she thanking me as well. My experience of this lady was that she was quite fearful that I was seeing her as sick.
## APPENDIX G

**Example of Constant Comparison During the Coding Phase**

<table>
<thead>
<tr>
<th>Comparison Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident with incident</td>
<td>Participant #1’s reading books about pain versus Participant #6’s researching about pain medications on the Internet</td>
</tr>
<tr>
<td>Incidents with codes</td>
<td>Participant #1’s talking with her friend about pain versus the code, <em>learning about pain</em></td>
</tr>
<tr>
<td>Codes with codes</td>
<td>Code, <em>learning about pain</em> versus code, <em>valuing being proactive</em></td>
</tr>
</tbody>
</table>
APPENDIX H

Example of a Memo

April 7, 2019 - Thinking Long-term/long-term survival

To keep on trucking, not giving up, continuing to self-doctor, continuing to choose conservative methods, seems to be in service of thinking and preparing for one’s life long-term. Chinese people tend to be cautious, thinking not just how they fare now, but how they will likely fare in the future. They don’t necessarily sit and ponder about their future, but they do engage in actions that will set up for an easier, more adaptable future. Avoiding pain meds is a big one. They are allowing themselves plenty of leeway. If they are in pain and take pain meds, then what’s going to happen if their pain gets worse? They would need to take stronger meds. This depletes their health. So, they bear with pain whenever possible (being conservative in order to minimize risk). Is avoiding depression also their way of thinking long term? They minimize their pain problem as a common physical issue that is part and parcel to aging (acceptance). This allows them to see their pain as an average problem. They don’t like to be in the extreme. Being average is a comfortable zone to be. They see their pain problem as subhealth – they can move towards sickness or health, depending on their actions. It is within their control. Subhealth connotes having some degree of control. It is due to unhealthy life habits like lack of exercise and poor diet. They also try to maintain positive relations with their friends / don’t want to blow through their support network. As well, they don’t believe that sharing their pain with their friends can help them with the pain. They see pain management as a personal endeavour. To engage in future-oriented planning/pain management as a project requires 1) a sense of control, an internal locus of control and also 2) an expectation of a positive outcome, or hope.
(APPENDIX H continued)

Now, suppose that this future-oriented thinking / manage pain as a personal long-term project is actually what’s happening. How does this core category vary?

- if your pain problem isn’t that significant (low severity), there’s no real need to do any planning or acting to manage the pain. You can just keep focus on the present. Your current needs and wants win out. You don’t need to do much exercising. (some participants have said they don’t do any physiotherapy exercise because they lazy and also their pain is not that bad.)

- if you have a lot to handle on your plate (stressors), like if you have to care for your children and family, and if you have financial worries, then you don’t have the luxury to engage in the pain management project

- if you have severe pain and major family responsibilities / stressors, BUT you also have good social support, then you are more likely to be able to work on your health.
APPENDIX I

Examples of Diagrams in Two Different Time Points of the Data Analysis

Created on June 17, 2017:

[Diagram with various nodes and connections labeled with statements and concepts related to pain management, family responsibility, and proactive/reactive coping strategies.]

Created on January 10, 2020:

[Diagram with nodes labeled Chinese-Informed Health Beliefs, Future-Oriented Thinking, Optimism, Conservative, Proactive, Access to Healthcare, Maintaining Control, Ownership of Pain Problem, and related statements and connections.]
APPENDIX J

Advertising Poster for a Workshop Conducted as a Means of Recruitment

4月6日無料研討會
慢性肌肉疼痛知多少？
从心里角度处理身体病症

Free Community Workshop: Managing chronic pain through non-medical strategies
您或你的亲人是否有患了长期的身体疼痛？您想了解更多关于如何处理疼痛的问题吗？卑斯大学 (UBC) 心理辅导博士研究生罗君颖 (Ada Law) 将会举办讲座，从心理及行为的角度来提供一些面对各种肌肉及关节长期疼痛的中文资料。欢迎各位人士报名参加。

Do you or your loved one suffer from chronic pain? Want more information about how to manage pain? UBC doctoral student and counsellor, Ada Law (MA, RCC), will provide a workshop in Mandarin about how to manage chronic pain using mental and behavioural strategies. Everyone welcomed!

<table>
<thead>
<tr>
<th>時間:</th>
<th>10:30 AM – 12:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>日期:</td>
<td>2018 年4月6日 星期五</td>
</tr>
<tr>
<td></td>
<td>(April 6, 2018 Friday)</td>
</tr>
<tr>
<td>地點:</td>
<td>City Centre 列治文社区中心 #105 – 5900 Minoru Blvd</td>
</tr>
<tr>
<td></td>
<td>City Centre Community Centre, Richmond</td>
</tr>
<tr>
<td>費用:</td>
<td>全免 (free of charge)</td>
</tr>
</tbody>
</table>

名額有限，請儘早登記

请致电 (604) 或发电邮至 并表明参加者人数

Workshop involves: prolonged sitting, looking at a projector, participating in a relaxation exercise

请注意：本讲座只提供教育材料，并不可取代医生或治疗师提供的个人指导。参与者可以自由使用他们认为合适的资料。

Disclaimer: This workshop for educational purpose only, and does not substitute individual guidance provided by a doctor or a therapist. Participants are free to use the educational material as they judge appropriate.