

4-30-2018

Exploring the Impact of Patient Perceptions of Health Care Provider Cultural Competence on Health-related Quality of Life among an Immigrant Population

Afef Zghal
University of Windsor

Follow this and additional works at: <https://scholar.uwindsor.ca/etd>

Recommended Citation

Zghal, Afef, "Exploring the Impact of Patient Perceptions of Health Care Provider Cultural Competence on Health-related Quality of Life among an Immigrant Population" (2018). *Electronic Theses and Dissertations*. 7434.
<https://scholar.uwindsor.ca/etd/7434>

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.

Exploring the Impact of Patient Perceptions of Health Care Provider Cultural Competence on Health-related Quality of Life among an Immigrant Population

By

Afef Zghal

A Thesis
Submitted to the Faculty of Graduate Studies
through the Faculty of Nursing
in Partial Fulfillment of the Requirements for
the Degree of Master of Science in Nursing
at the University of Windsor

Windsor, Ontario, Canada

2018

© 2018 Afef Zghal

Exploring the Impact of Patient Perceptions of Health Care Provider Cultural Competence on Health-related Quality of Life among an Immigrant Population

by

Afef Zghal

APPROVED BY:

S. McMurphy
Department of Sociology, Anthropology and Criminology

M. El-Masri
Faculty of Nursing

K. Pfaff, Advisor
Faculty of Nursing

April 18, 2018

DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

ABSTRACT

As immigrants represent a growing proportion of the Canadian population, understanding their health care needs and experiences becomes imperative to facilitate their successful integration into society. This study explores the impact of patient perceptions of healthcare provider cultural competence on health-related quality of life (QOL) and health care satisfaction among an immigrant population in Southwestern Ontario. A sample of 117 new immigrant participants completed a cross-sectional survey which included a demographic questionnaire, the Consumer Assessment of Healthcare Providers and Systems Cultural Competency (CAHPS-CC) Item Set, and the World Health Organization Quality of Life instrument (WHOQOL-BREF). Stepwise linear regression analyses were conducted to identify which variables predicted health-related QOL and satisfaction with care among participants. Study findings suggest that three aspects of cultural competence were predictive of health-related QOL: experiences of discrimination, interpreter use, and overall trust in provider. Age, education, and number of children were also predictive of health-related QOL. Health care satisfaction was predicted by: patient-provider communication, overall trust in provider, experiences of discrimination, and education. Overall, experiences of discrimination were most predictive of QOL among participants. These experiences significantly impacted psychological, social, and environmental aspects of QOL. Future research should consider utilizing qualitative or mixed methods approaches to gain more insight into how culturally competent care impacts the health and well-being of newcomer populations.

DEDICATION

I would like to dedicate this work to immigrants across Canada and around the world who have left their homes, families, and communities to seek better opportunities in a new country. I especially dedicate this work to refugees who were forced to flee their home countries due to conflict and insecurity, and struggled to build new lives.

I hope this research sheds light on the health care experiences of immigrants in our region, and enables positive changes that reflect and honour newcomer voices and perspectives. May we always strive towards providing culturally competent and equitable health care to all those who we serve.

ACKNOWLEDGEMENTS

I would like to acknowledge the members of my thesis committee, Dr. Kathryn Pfaff, Dr. Maher El-Masri, and Dr. Suzanne McMurphy. I would like to start by thanking my principal advisor, Dr. Kathryn Pfaff, for being an inspiring teacher and mentor over the years. She has been a constant source of encouragement, support, and guidance throughout this journey, and I am truly grateful for her time and patience. This work would not have been possible without her direction and help.

I would also like to thank my internal reader, Dr. Maher El-Masri, for his invaluable feedback and contributions to this project. His statistical guidance and expertise have undoubtedly strengthened this work.

My external reader, Dr. McMurphy, also offered valuable insights and a unique perspective to this study. Thank you for being a part of my thesis committee and for your thoughtful suggestions throughout this endeavour.

Additionally, I would like to express my gratitude to the New Canadians' Centre of Excellence Inc. (NCCE) and the Multicultural Council (MCC) of Windsor and Essex County for assisting with the recruitment of participants for this study.

Last but not least, to my family and friends, thank you for your unconditional love and support. I am forever grateful for the encouragement you have given me to pursue my academic dreams. You stood with me at every step of this journey and never doubted I would reach the end successfully.

TABLE OF CONTENTS

DECLARATION OF ORIGINALITY	iii
ABSTRACT.....	iv
DEDICATION.....	v
ACKNOWLEDGEMENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF APPENDICES	xi
CHAPTER 1: INTRODUCTION.....	1
Purpose of Study & Research Questions.....	6
Significance of Study	7
Conceptual Framework	11
Overview of the Interaction Model of Client Health Behavior	11
CHAPTER 2: LITERATURE REVIEW	15
Search strategy	15
A Concept Analysis.....	17
Defining Attributes	18
Antecedents	20
Related Concepts	22
Consequences	24
Measures of Cultural Competence	26
Measuring Cultural Competence from the Patient Perspective.....	27
Cultural Competence and Immigrant Populations	35
CHAPTER 3: METHODOLOGY	37
Research Design.....	37
Sample and Setting.....	37
Ethical Considerations.....	38
Variable Definitions & Instrumentation.....	38
Demographics	39
Healthcare Provider Cultural Competence	39
Health-related Quality of Life	43
Satisfaction with Care.....	46

Data Collection.....	46
Data Screening and Analysis.....	46
CHAPTER 4: RESULTS	49
Data Screening and Management.....	49
Sample Characteristics	52
Research Question #1: Health-related QOL.....	55
Research Question #2: Satisfaction with Care	63
CHAPTER 5: DISCUSSION	67
Research Question #1	67
Experiences of Discrimination	67
Interpreter Use	71
Overall Trust in Provider.....	73
Age.....	75
Education	76
Number of Children.....	77
Research Question #2.....	78
Satisfaction with Care.....	78
Degree of Fit with Conceptual Framework.....	80
Implications and Recommendations for Nursing.....	81
Practice and Education	81
Policy Development	83
Future Research	84
Limitations	86
Conclusion.....	88
REFERENCES.....	90
APPENDICES	115
Appendix A: Study Questionnaire	115
Appendix B: Letter of Information for Consent to Participate in Research.....	124
VITA AUCTORIS	127

LIST OF TABLES

Table 1. Sample Characteristics.....	54
Table 2. Health-related QOL – One-way ANOVA Analyses.....	57
Table 3. Health-related QOL – Pearson Correlations.....	60
Table 4. Health-related QOL – Step-wise Linear Regression Analyses.....	62
Table 5. Satisfaction with Care – One-way ANOVA Analyses.....	63
Table 6. Satisfaction with Care – Pearson Correlations.....	65
Table 7. Satisfaction with Care – Step-wise Linear Regression Analyses.....	66

LIST OF FIGURES

Figure 1. Interaction Model of Client Health Behaviour (Cox, 1982).....	12
Figure 2. Elements of the IMCHB to be examined in the present study	13
Figure 3. A concept analysis of cultural competence	18
Figure 4. An operationalized model of the study variables	48

LIST OF APPENDICES

Appendix A. Study Questionnaire	115
Appendix B. Letter of Information for Consent to Participate in Research	124

CHAPTER 1

INTRODUCTION

Immigration and the Health of Immigrants

Immigration has been and continues to be an important force shaping Canadian identity and culture (Gushulak, Pottie, Roberts, Torres, & DesMeules, 2011). Each year, nearly 250,000 immigrants make Canada their new home (Subedi & Rosenberg, 2014). In 2011, immigration accounted for two-thirds of the country's population growth (Gushulak et al., 2011), and immigrants represented approximately 20% of the total population (Dean & Wilson, 2010; Statistics Canada, 2013). Current projections indicate that immigrants will continue to make up an increasing proportion of the Canadian population, and that by 2025, immigrants will become the single source of population growth in Canada (Dean & Wilson, 2010). International migration and population growth of this size has important implications for health care providers and the Canadian health care system (Gushulak et al., 2011).

Recent literature highlights disparities in the health status of Canada's foreign-born immigrant population and the Canadian-born population (Newbold, 2009). At time of entry into the country, most new immigrants have fewer chronic conditions or disabilities and better self-reported and functional health compared to those born in Canada (Dean & Wilson, 2010; Newbold, 2009; Setia, Lynch, Abrahamowicz, Tousignant, & Quesnel-Vallee, 2011). Over a period of five to ten years however, the health of new immigrants deteriorates and reaches levels equal to, and in some cases worse than their Canadian-born counterparts (Dean & Wilson, 2010; Newbold, 2009). This foreign-born health advantage is known as the 'healthy immigrant effect' (HIE) and

has also been observed among immigrants in other developed countries such as the US, Australia, and the UK (Dean & Wilson, 2010; Subedi & Rosenberg, 2014). The HIE describes a phenomenon whereby the health status of immigrants upon arrival in their new country is high, but subsequently declines and converges to that of the native-born population with increased length of stay in that country (Dean & Wilson, 2010; Newbold, 2009; Subedi & Rosenberg, 2014).

Although very little is known about what happens immediately after arrival, it appears that the first few years post-resettlement are critical from a health perspective (Newbold, 2009). Various hypotheses have been proposed to understand the HIE (Subedi & Rosenberg, 2014); however, the health transition of new Canadian immigrants remains poorly understood (De Maio & Kemp, 2010). The phenomenon is multifaceted, as the health of immigrants is affected by genetic, socio-cultural, environmental, and economic factors (Gushulak et al., 2011). Immigrant health is also influenced by factors such as: a) integration into their new place of residence; b) social determinants of health such as socioeconomic status, social support networks, education, employment, and culture; and c) the accessibility and responsiveness of health care providers and health care systems in meeting their unique health needs (Gushulak et al., 2011).

The Emergence of Cultural Competence

The surge of immigrants into Canada has introduced great diversity in language and culture to the country (Anderson et al., 2003). Canadians speak no less than 200 languages, with 6.8 million Canadians speaking a language other than English or French at home (Anderson et al., 2003; Statistics Canada, 2013). In the 2011 National Household Survey, more than 200 ethnic origins were reported, with 13 different ethnic

origins surpassing the 1-million mark (Statistics Canada, 2013). In response to this expanding cultural diversity and the need to better understand and meet the healthcare needs of the immigrant population, the field of *cultural competence* in healthcare emerged (Anderson et al., 2003; Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003).

Cultural competence is defined as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency or amongst professionals and enables that system, agency or those professionals to work effectively in cross-cultural situations” (Anderson et al., 2003; Cross, Bazron, Dennis, & Isaacs, 1989). *Culture* refers to “the integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups” (Cross et al., 1989). *Competence* implies “having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities” (Cross et al., 1989). Cultural competency goes beyond the notions of cultural awareness and sensitivity (Brach & Fraserirector, 2000). It includes the possession of cultural knowledge, respect for different cultural perspectives, as well as the skill and desire required to use them effectively in cross-cultural interactions (Brach & Fraserirector, 2000).

Within health care, cultural competence refers to the ability of systems to provide care to patients with diverse values, beliefs and behaviors, and tailor the delivery health care services to meet patients’ socio-cultural and linguistic needs (Betancourt et al., 2002). A culturally competent health care system is one that recognizes the importance

of culture in assessment of cross-cultural interactions, is attentive towards the dynamics that result from cultural differences, and adapts services to meet the culturally unique needs of individuals and groups (Betancourt et al., 2003). Furthermore, the notion of cultural competence asserts that a “one-size-fits-all” health care system cannot meet the needs of an increasingly diverse population (Brach & Fraserirector, 2000). When implemented properly, culturally competent health care has the potential to improve health care access and quality, and reduce health disparities for immigrant populations (Smith, 2013).

Health disparities related to ethnicity and race are increasingly documented in the literature, with data revealing that minority groups suffer disproportionately from conditions such as cardiovascular disease, diabetes, asthma, and cancer (Betancourt et al., 2003). These disparities have also been shown to exist in the rates of diagnostic testing and screening uptake, as well as the use of prescription analgesics for pain management (Betancourt et al., 2003). Despite sufficient research documenting the existence of health disparities such as these, their causes remain complex and difficult to understand and explain (Betancourt et al., 2003; Kagawa-Singer & Kassim-Lakha, 2003; Ngo-Metzger et al., 2006). Among the many root causes of these disparities are differences in patients’ and providers’ health beliefs, views, and behaviours (Betancourt et al., 2003). These include variations in patients’: (a) thresholds for seeking care as well as expectations of care; (b) recognition of symptoms and ability to communicate these symptoms; and (c) ability to understand treatment options and adhere to the prescribed management plan (Betancourt et al., 2003). Other significant causes of health disparities have been

attributed to barriers in accessing routine preventative care and low levels of cultural competence among health care providers (Kagawa-Singer & Kassim-Lakha, 2003).

The successful delivery of health care within a multicultural population is also hindered by factors such as: language and non-verbal communication barriers between providers and patients; a provider's lack of openness and respect towards different cultural beliefs and perspectives; and interpersonal as well as institutional stereotyping and prejudice (Renzaho, Romios, Crock, & Sønderlund, 2013). Whether conscious or unconscious, negative social stereotypes influence behaviors and decisions made by providers and their patients during clinical encounters (Anderson et al., 2003). Among patients, distrust, miscommunication, perceived discrimination, and negative experiences in health care interactions can impact future health-seeking behaviour and result in delay or refusal to seek needed care (Anderson et al., 2003; Betancourt, Green, & Carrillo, 2002). In turn, this may lead to patient dissatisfaction, poor adherence to medications and health promotion strategies, and poorer health outcomes (Betancourt et al., 2002). These health consequences affect minority subgroups of the population and immigrant groups in particular (Betancourt et al., 2002; Kumagai & Lypson, 2009).

To successfully address and eliminate these persistent disparities, valid and reliable measures of culturally competent care that incorporate the perspectives of diverse patients are essential (Nápoles et al., 2012). Although numerous measures of cultural competence have been developed at the health care provider or organizational level, very little has been done to develop and employ valid consumer-reported measures based on the perspectives of minority groups, such as the immigrant population (Nápoles et al., 2012).

A consumer or patient-centred approach to the process and delivery of health care has been identified in the literature as vital to providing culturally competent care (Ngo-Metzger et al., 2006). Patient-centeredness involves seeing “through the patient’s eyes” and placing each patient at the centre of his or her own care (Ngo-Metzger et al., 2006). An emphasis on culturally competent patient-centred care is important because it ascertains that the health care needs of diverse populations are being met, and that current measures of quality of care are capturing aspects of quality that are relevant for these individuals (Nápoles et al., 2012). Patients’ perceptions of cultural competence are also key in improving patient satisfaction with care and engagement in health services (Damashek, Bard, & Hecht, 2012). Thus, one very important way to measure the quality of culturally competent care is to obtain patients’ perspectives (Ngo-Metzger et al., 2006).

Purpose of Study & Research Questions

The primary purpose of this study is to explore the impact of patient perceptions of healthcare provider cultural competence on health-related quality of life among an immigrant population in Southwestern Ontario. The secondary purpose of this study is to explore the impact of patient perceptions of healthcare provider cultural competence on health care satisfaction among this population. Therefore the primary research question is: *Do patients’ perceptions of healthcare provider cultural competence predict health-related quality of life among immigrant populations?* The second research question is: *Do patients’ perceptions of healthcare provider cultural competence predict satisfaction with care among immigrant populations?*

Significance of Study

The proposed study is significant for several reasons. Addressing several gaps in the literature, this study will explore, for the first time in Canada, the impact of cultural competence on health-related outcomes among immigrant populations. More specifically, this study will: (a) shed light on the poorly understood health of immigrant populations in the region; (b) assess immigrant patients' perceptions of healthcare provider cultural competency; and (c) explore the link between provider cultural competence and patient health outcomes. These three points will be further explained in the following section.

Understanding Immigrant Health

As immigrants form a significant and growing proportion of the Canadian population, understanding the health of immigrants is imperative. Many new immigrants underutilize health care resources, experience worsening health status over time, and face multiple barriers in accessing appropriate health care services (Wang, 2014; Wang & Hu, 2013). While there are many suggested reasons for declining health status among immigrants, this has frequently been explained by the adoption of a "Canadian lifestyle" and the uptake of poor health behaviours and practices upon resettlement (Newbold, 2009; Subedi & Rosenberg, 2014). Barriers to accessing and receiving health care services are also hypothesized to be major causes of deteriorating health status among new immigrants to Canada (Subedi & Rosenberg, 2014). Inability to communicate in either of the official languages, unease or distrust of the health care system, lack of culturally competent care and appropriate services, poor social support networks, and lack of belonging to local communities are the main barriers faced by new immigrants

trying to access and utilize available health care services (Newbold, 2009; Subedi & Rosenberg, 2014).

Understanding the factors that impact deterioration in immigrant health status post resettlement is essential to providing the needed health promotion and prevention services to an increasingly diverse population (Gushulak et al., 2011). It is a first step to improving the accessibility and responsiveness of health care for immigrant populations, and to establishing population-specific and culturally competent health care policy (Dean & Wilson, 2010; Gushulak et al., 2011; Subedi & Rosenberg, 2014). Furthermore, this understanding is necessary in order to address curricular gaps in health care education and better train providers to meet the needs of a culturally heterogeneous patient population (Kumagai & Lypson, 2009). Education regarding cultural competence must go beyond the notions of *competency* as basic knowledge, skills, and attitudes (Kumagai & Lypson, 2009). Cultural competence education in the fields of nursing and medicine alike must “involve the fostering of a critical awareness – a critical consciousness – of the self, others, and the world and a commitment to addressing issues of societal relevance in health care” (Kumagai & Lypson, 2009, p. 782).

Assessing Immigrant Patients’ Perceptions of Provider Cultural Competency

To date, culturally competent care research has been largely measured by health care providers’ knowledge and attitudes rather than patients’ evaluations of the care they receive (Stern et al., 2012). Numerous instruments exist that measure providers’ perceptions or self-reported levels of cultural competence; however, very few instruments offer measures of culturally competent care from the patient’s perspective (Loftin et al.,

2013). This gap in the literature is a problematic finding considering that no provider perspective can ever fully capture that of a patient (Stern et al., 2012).

According to Thom and Tirado (2006), there is a lack of association between provider and patients' reports of cultural competency, suggesting that provider self-assessment of culturally competent behaviors cannot be used to replace patient-reported cultural competency (Thom & Tirado, 2006). Additionally, patients' assessments of the degree to which their care is culturally competent will be more closely linked to clinical outcomes than the assessments of providers (Stern et al., 2012). This was consistent with findings from the study by Thom and Tirado (2006), where providers' self-assessed cultural competency was not associated with patient trust or satisfaction, nor with any of the processes or outcomes of care examined.

Improving provider cultural competency is becoming more and more important as the number of providers who are underrepresented minorities lags behind the growing diversity of the Canadian population, increasing the likelihood of significant cultural gaps between providers and patients (Thom & Tirado, 2006). Furthermore, the measurement of patient-perceived provider cultural competency and its effect on patient outcomes is needed to inform future nursing practice, education and research in this emerging area (Loftin et al., 2013).

Exploring the link between Provider Cultural Competence and Patient Outcomes

In light of Canada's changing demographics and an increasingly multicultural population (Dean & Wilson, 2010; Gushulak et al., 2011), it is necessary for health care providers and health systems to acknowledge and address the impact of culture on health and health outcomes (Loftin, Hartin, Branson, & Reyes, 2013). This is critical

considering that health, and the means to attaining, maintaining, and regaining well-being are culturally defined (Kagawa-Singer & Kassim-Lakha, 2003). Furthermore, the emergence and movement toward cultural competence in health care has gained national attention from health care policymakers, administrators, providers, educators, and consumers as a strategy to reduce health disparities and improve the delivery of quality care to every individual, regardless of race, ethnicity, culture, or language proficiency (Betancourt et al., 2002; Betancourt et al., 2003; Betancourt, Green, Carrillo, & Park, 2005; Nápoles et al., 2012; Stern et al., 2012).

Although the operationalization and utility of cultural competence in health care has been extensively theorized, a scarce amount of empirical research actually links the concept to clinical outcomes (Stern et al., 2012). A concept analysis in the next chapter describes the main consequences or expected outcomes related to the practice of cultural competence. These outcomes are divided into three categories: improved patient outcomes (Kagawa-Singer & Kassim-Lakha, 2003; Lie, Lee-Rey, Gomez, Bereknyci, & Braddock, 2011; Suh, 2004); enhanced patient-provider interactions (Brach & Fraserirector, 2000; Dudas, 2012; Saha et al., 2008); and the provision of more appropriate services (Anderson et al., 2003; Betancourt et al., 2003; Brach & Fraserirector, 2000; Dudas, 2012). Unfortunately, the measurement of these outcomes has not always been based on patient-centred measures. A lack of measures capturing patient-level experiences with culturally competent care has served as a major barrier in linking cultural competence to measurable outcomes (Stern et al., 2012). This research gap has slowed the advancement and development of patient-centred strategies to improve the delivery of culturally competent health care (Stern et al., 2012).

In the proposed study, exploring patients' perceptions of healthcare providers' cultural competence using a valid and reliable instrument will allow for the subsequent investigation of the relationship between culturally competent care and outcomes such as health-related quality of life and satisfaction with care (Stern et al., 2012; Weech-Maldonado et al., 2012).

Conceptual Framework

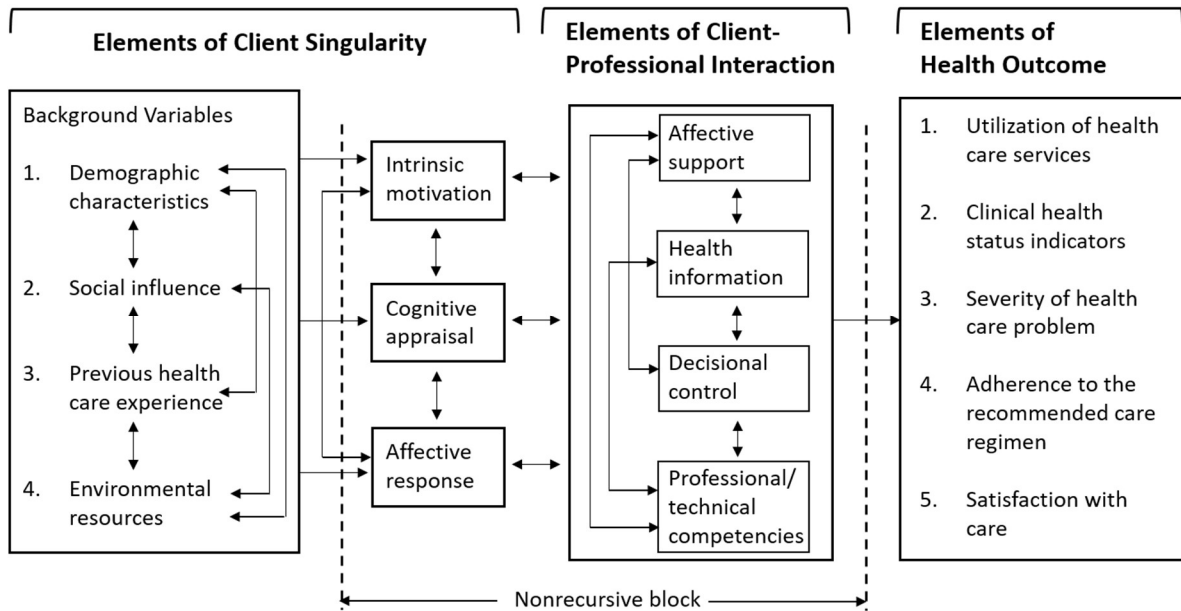
Overview of the Interaction Model of Client Health Behavior

Cox's (1982) Interaction Model of Client Health Behaviour (IMCHB) will serve as the conceptual framework for this study. The IMCHB was proposed in 1982 as a "theoretical prescription for nursing," representing a progressive change from the leading descriptive and predictive theoretical approaches (Carter & Kulbok, 1995). Prescriptive theory incorporates factor-isolating (classification), factor-relating (situation depicting), and situation-relating (predictive) theories (Carter & Kulbok, 1995). This level of theory allows for the identification and prescription of desired outcomes and the situation-specific process toward those outcomes (Carter & Kulbok, 1995).

As a process model, Cox's (1982) IMCHB was designed to "incorporate each client's individual differences into a systematic and comprehensive structure that examines the multiple determinants of health behaviours" (Robinson & Thomas, 2004). The model consists of three major elements: client singularity, client-professional interaction, and health outcomes (Cox, 1986). In effect, the purpose of the model is to identify and explain relationships between client singularity, the client-provider relationship, and subsequent client health care behaviour and health outcomes (Cox, 1982).

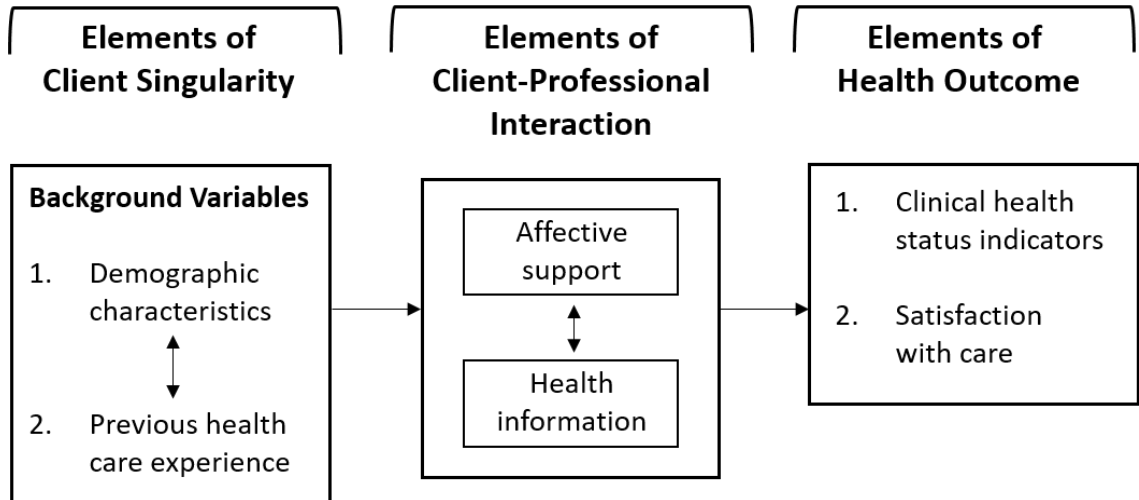
Cox's (1982) model is presented in Figure 1. It depicts a multidirectional causal flow with feedback loops and arrows suggesting that each element mutually influences other elements and their associated variables (Cox, 1982). Instead of a one-way association between client singularity, client-professional interaction, and health outcome, Cox (1982) suggests that a reciprocal relationship exists between the three elements (Mathews, Secrest, & Muirhead, 2008).

Figure 1. Interaction Model of Client Health Behaviour (Cox, 1982)



For the purpose of this study, a modified version of the model was used. The elements and variables specific to this adapted IMCHB are presented in Figure 2. Only the concepts which support the relationships to be examined are included in the adapted model.

Figure 2. Elements of the IMCHB to be examined in the present study



Elements of the Interaction Model of Client Health Behavior

Client singularity. The most complex element of the IMCHB is client singularity, which emphasizes the unique and holistic components of a patient (Mathews et al., 2008; Troumbley & Lenz, 1992). This element comprises of four background variables (demographic characteristics, social influence, previous health care experience, and environmental resources), and three cognitive and affective aspects of the client that are influenced by the background variables: the individual's intrinsic motivation, and cognitive appraisal of and affective responses to health issues (Carter & Kulbok, 1995; Troumbley & Lenz, 1992). In the present study, two of the four background variables under this element were explored: demographic characteristics and previous health care experience. The client singularity element influences the subsequent element of client-professional interaction (Troumbley & Lenz, 1992).

Client-professional interaction. The next major category of the IMCHB and one of particular relevance to nurses are the elements of client-professional interaction (Mathews et al., 2008). The elements of client-professional interaction consist of:

affective support, health information, decisional control, and professional and technical competencies (Carter & Kulbok, 1995). The client-professional interaction elements enable the researcher to examine nursing practice issues, such as cultural competency in the patient-provider interaction, a central component of the present study (Carter & Kulbok, 1995). The elements of affective support and health information were examined under this category.

Health outcome. The final category of the IMCHB is health outcome, which includes measures of health behaviors categorized as: utilization of health care services, clinical health status indicators, severity of health care problem, adherence to the recommended care regimen, and satisfaction with care (Carter & Kulbok, 1995). These elements take into account a broad range of possible outcomes that result from nursing interventions (Carter & Kulbok, 1995). The elements of health outcome represent measures of the effectiveness of the “prescriptive” component of nursing interventions (Carter & Kulbok, 1995). In the present study, only two of the five elements of health outcome were operationalized: clinical health status indicators and satisfaction with care. Clinical health status indicators were explored as the primary outcome of the study, whereas health care satisfaction was explored as secondary outcome.

CHAPTER 2

LITERATURE REVIEW

This chapter begins with a description of the search strategy followed by a conceptual analysis of cultural competence through a review of the literature. Next, cultural competence measures from health care provider and patient perspectives are discussed, followed by an overview of gaps in the literature regarding cultural competence and immigrant populations.

Search strategy

Research findings presented in this literature review were obtained through a systematic search of four online databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Proquest, PubMed, and MEDLINE via Ovid. The search was limited to articles in English published between January 1990 and December 2016, with no restrictions on geographical location. In addition, published theses and dissertations, internet search engines such as Google and Google Scholar, and websites of professional nursing associations and governing regulatory bodies in Canada were searched using key words and related content. Key words in a variety of combinations were used in the search process and included: *cultural competence, cultural competency, culture, health, healthcare, nursing, immigrant, immigration, patient, patient perspective, patient experience, healthcare provider, provider perspective, tool, instrument, measure, evaluate, patient outcomes, health outcomes*. The keywords were present in the title, abstract, or the text of the article. Bibliographies of relevant articles and documents obtained from the search process were further scanned for other potentially relevant articles.

A Background

Over the last few decades, the concept of cultural competence has become more prevalent in the nursing and healthcare literature and increasingly recognized as an essential component of nursing practice (Burchum, 2002; Capell, Veenstra, & Dean, 2007). The origins of this concept began with Leininger (1988) who developed the concept of transcultural nursing and the theory of Culture Care Diversity and Universality (Suh, 2004). During this time, Leininger implicitly described the concept of cultural competence in terms of culturally congruent nursing care and as a means of addressing culturally-specific health needs (Capell et al., 2007; Suh, 2004).

In the late 1990s, several theories and models were developed to address the phenomena of cultural diversity and commonality and include patient's cultural factors in nursing practice, including: Purnell's Model for Cultural Competence (Purnell & Paulanka, 1998); Warren's (1999) Cultural Competence: An Interlocking Paradigm; and Campinha-Bacote's (1999) Process of Cultural Competence in the Delivery of Healthcare Services (Suh, 2004). These models along with several others provided a range of theoretical guides for achieving culturally competent care in nursing practice and research (Suh, 2004).

In recent years, the concept of cultural competence has been promoted as a key approach to enhancing health care delivery and quality at the interpersonal and health system levels (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Dudas, 2012; Saha, Beach, & Cooper, 2008). Being addressed both explicitly and implicitly in many published articles, the trend towards promoting cultural competence in healthcare has produced a growing body of research concerned with recognizing the cultural and

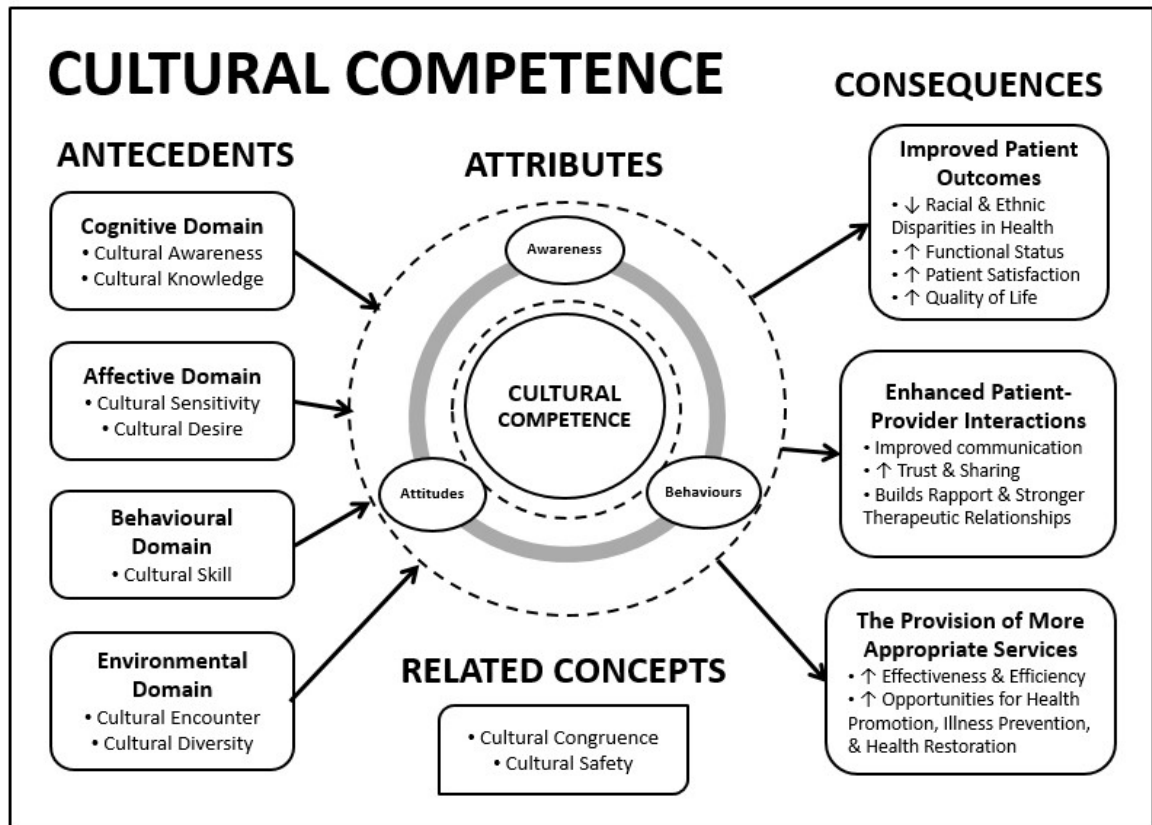
linguistic barriers that exist between healthcare providers and patients, and addressing the widespread health and health care disparities that persist among racial and ethnic minority groups (Betancourt et al., 2003; Saha, Beach, & Cooper, 2008; Suh, 2004).

Despite gaining increased momentum and popularity, inconsistencies and considerable ambiguity have revolved around the definition of cultural competence in the literature and its use across healthcare settings (Cai, 2016; Saha et al., 2008). Although a distinct concept, cultural competence is often used interchangeably with other concepts and similar terminology, such as cultural awareness, cultural sensitivity, and cultural safety (Brach & Fraserirector, 2000; Cai, 2016). The concept of cultural competence is also frequently used with little conceptual clarity in the literature, creating confusion regarding the already abstract concept (Ahmed & Bates, 2010; Cai, 2016). Therefore, enhancing conceptual clarity through a concept analysis is needed in order to capture the depth and complexity of the concept, and to provide a frame of reference within which the proposed study will be carried out (Burchum, 2002).

A Concept Analysis

An analysis of the concept of cultural competence follows. This analysis considers the antecedents, defining attributes, related concepts, and consequences of cultural competence (Walker & Avant, 1995) as identified and discussed in the literature (See Figure 3).

Figure 3. A concept analysis of cultural competence



Defining Attributes

In the literature, cultural competence is described as a *process* that can be categorized into three dimensions or attributes: *awareness, attitudes, and behaviours* (Dudas, 2012). Cultural competence is a process or “journey” in which there is no definitive end point to be achieved (Capell et al., 2007; Dudas, 2012). Instead, the concept is described as a fluid, dynamic process of “becoming” rather than “being” culturally competent (Campinha-Bacote, 1999, p. 203). According to Campinha-Bacote (1999), cultural competence is “the process in which the healthcare provider continuously strives to achieve the ability to effectively work within the cultural context of a client” (p. 203). It is also defined as “an ongoing process with the goal of achieving ability to work effectively with culturally diverse groups and communities with a detailed awareness,

specific knowledge, refined skills, and personal and professional respect for cultural attributes, both differences and similarities” (Suh, 2004, p. 96). The three defining attributes of cultural competence will be described below.

Awareness. This attribute involves an awareness of oneself and others (Jirwe, Gerrish, & Emami, 2006). Awareness appears in the context of intrapersonal, interpersonal, and organizational/system domains of cultural competence (Soulé, 2014). At the intrapersonal level, this is an awareness of personal beliefs, attitudes, and biases (Dudas, 2012; Soulé, 2014). Biases may involve racism, stereotyping, or generalizations, all of which have the potential to interfere with the achievement of cultural competence (Dudas, 2012). At the interpersonal level, the awareness is of another in relationship to oneself (Soulé, 2014). Finally, at the organizational/system level, awareness takes into consideration the entire health care system, where there is greater potential in achieving health equity between and among populations (Soulé, 2014).

Attitudes. This second attribute involves having an open, accepting, respectful, objective, and non-judgemental attitude towards the cultural attributes and ways of others (Dudas, 2012; Suh, 2004). These attitudes are what lead to the development of insights related to the influence of culture on the beliefs, values, and behaviours of diverse groups of people (Burchum, 2002). Some may argue that these attitudes are a moral and ethical responsibility of nurses, allowing one to deal with issues such as marginalization and subjection, which occur when the values and beliefs of one culture differ from those of the dominant or majority culture (Burchum, 2002; Dudas, 2012).

Behaviours. This third attribute represents the ability to work effectively with others, and involves the actions taken by healthcare providers while interacting within,

among, or between groups (Dudas, 2012; Soulé, 2014). It also involves the extensive skill or capacity to resolve cultural disparity between patients and healthcare providers (Suh, 2004). This capacity is adaptable and therefore subject to influences such as new knowledge and experience (Soulé, 2014).

Antecedents

Antecedents are the events or incidents that must precede the occurrence of a concept (Walker & Avant, 1995). The antecedents of cultural competence can be grouped according to four domains: *cognitive, affective, behavioral, and environmental* (Suh, 2004).

Cognitive domain. This domain includes cultural awareness and cultural knowledge. *Cultural awareness* represents a cognitive recognition of a need for cultural competence (Suh, 2004). Cultural awareness is an initial step towards appreciating the values, beliefs, practices, and lifeways of an individual or group from another culture (Oelke, Thurston, & Arthur, 2013). It embraces the exploration of one's own culture, and the prejudices and biases one may have towards other cultures (Campinha-Bacote, 2002; Jirwe et al., 2006; Suh, 2004). *Cultural knowledge* is the underlying background knowledge needed to understand other cultures and meet specific cultural needs (Jirwe et al., 2006; Suh, 2004). Gaining cultural knowledge is acknowledged as a lifelong endeavor; it is acquired primarily from health care recipients (Zander, 2006). This knowledge is utilized in a skilful and artful manner to provide culturally competent care to each patient (Jirwe et al., 2006; Zander, 2006).

Affective domain. Cultural sensitivity and cultural desire are antecedents in the affective domain (Campinha-Bacote, 2002; Suh, 2004). *Cultural sensitivity* represents an

intentional, affective perception of cultural diversity, which is an essential component of cultural competence (Suh, 2004). It involves respect for cultural differences and having an accepting attitude (Burchum, 2002; Dudas, 2012; Suh, 2004). According to O'Hagan (2001), "Cultural competence is the ability to maximize sensitivity and minimize insensitivity in the service of culturally diverse communities" (p. 235). *Cultural desire* is the motivation or willingness to want to, rather than have to, engage in the process of becoming culturally aware, knowledgeable, skillful, and competent (Campinha-Bacote, 2002; Jirwe et al., 2006; Zander, 2006). It involves a "genuine passion to be open and flexible with others, to accept differences and build on similarities, and to be willing to learn from others as cultural informants" (Campinha-Bacote, 2002, p. 183).

Behavioural domain. Exhibiting proficient cultural skill is an antecedent in the behavioural domain (Suh, 2004). *Cultural skill* is known as the behavioural ability to interact cross-culturally in a skillful manner (Alizadeh & Chavan, 2016). It is the ability to collect relevant health data, conduct accurate physical assessments, and communicate effectively with people of other cultures, either personally or through the use of an interpreter when needed (Burchum, 2002; Saha et al., 2008; Suh, 2004; Zander, 2006). Cultural skill enables healthcare providers to understand and properly respond to the needs of culturally and linguistically diverse individuals and groups, and determine appropriate plans of care within the context of those receiving this care (Suh, 2004; Zander, 2006).

Environmental domain. The cultural encounter and cultural diversity are the last two antecedents of cultural competence that fall under the environmental domain (Dudas, 2012; Suh, 2004). The *cultural encounter* refers to the situation in which a healthcare

provider interacts with a patient from a culture other than his or her own (Suh, 2004). The encounter provides an environment which allows cultural competence to take place (Suh, 2004). According to the Registered Nurses' Association of Ontario (RNAO, 2007), *cultural diversity* is defined as “a broad term and can refer to any number of distinct qualities, traits or characteristics – including, but not limited to skin colour, gender, age, race and ethnic identification, citizenship, sexual orientation, and physical and cognitive abilities” (p.19). Culture is important because it determines how people define health, wellness, and illness (Capell et al., 2007). Culture also shapes health-seeking behaviours and defines the roles and expectations of patients and healthcare providers (Capell et al., 2007). As the cultural diversity of patients continues to grow, promoting positive changes in health behaviour and optimal health outcomes for all people will become even more dependent upon the cultural competence of providers, and the quality of their interactions with patients (Capell et al., 2007).

Related Concepts

The literature revealed a number of concepts or terms related to cultural competence, the main ones being cultural congruence and cultural safety.

Cultural congruence or culturally congruent care is most closely related to cultural competence, and is defined as care that is meaningful and fitting to the cultural beliefs and lifeways of people (Dudas, 2012; Shen, 2015). It is also defined as the “use of culturally based care knowledge . . . in assistive, facilitative, sensitive, creative, safe, and meaningful ways to individuals or groups for beneficial and satisfying health and well-being or to face death, disabilities, or difficult human life conditions” (Leininger, 1991).

Cultural safety is a relatively new concept that emerged in the late 1980s as a framework for the delivery of more appropriate health care services for the indigenous Maori people of New Zealand (Polaschek, 1998). It is an evolving term defined as both a process and an outcome (Canadian Nurses Association, 2010). Specifically, it is an outcome of nursing education that enables safe service to be defined by those who receive it (Wepa, 2003). Culturally safe practices are actions which recognize and respect the cultural identities of others, and safely meet their needs, expectations and rights (National Aboriginal Health Organization [NAHO], 2006; Oelke et al., 2013). In contrast, culturally unsafe practices are those that “diminish, demean or disempower the cultural identity and well-being of an individual” (NAHO, 2006).

The conceptualization of cultural safety has been central in shifting the focus away from ethno-cultural characteristics or differences, to understanding how peoples’ health is linked to the complex social, economic and political contexts in which they live (Gerlach, 2012). The concept, however, has some limitations to its application and use. Given its level of abstraction, operationalization of the concept is limited among patients and healthcare providers (Blanchet & Pepin, 2012). In addition, no tools or instruments currently exist to measure the concept. Promoted as an effective process for managing cultural risk in health care, nursing scholars advocate that cultural safety is not a checklist of skills or standards for practice, but rather, “a way of questioning how we are positioned in relation to our patients and in relation to the system of health delivery in which we practice” (Gerlach, 2012).

Consequences

Despite sparse outcomes research on cultural competence, several consequences or expected outcomes are addressed in the reviewed literature. These consequences are divided into three categories: *improved patient outcomes, enhanced patient-provider interactions, and the provision of more appropriate services.*

Improved patient outcomes. The most noteworthy consequences related to the sound implementation of cultural competence include the improvement of patient health outcomes and the reduction of racial and ethnic health disparities (Brach & Fraserirector, 2000; Dudas, 2012; Kagawa-Singer & Kassim-Lakha, 2003; Lie, Lee-Rey, Gomez, Bereknyei, & Braddock, 2011; Suh, 2004). A large body of literature has documented the existence of racial and ethnic disparities in health care and health outcomes, with minority individuals generally receiving less health care and suffering worse health than the rest of the population (Betancourt et al., 2003; Brach & Fraserirector, 2000; Shen, 2015). The practice of cultural competence has the potential to improve health care access and quality and reduce health disparities for minority groups (Kagawa-Singer & Kassim-Lakha, 2003; Smith, 2013). Despite limited outcomes research, cultural competence is also commonly associated with improved quality of life and functional status, and increased patient satisfaction (Brach & Fraserirector, 2000; Dudas, 2012; Renzaho, Romios, Crock, & Sønderlund, 2013; Saha et al., 2008; Suh, 2004).

Enhanced patient-provider interactions. Cultural competence centers on bridging cultural barriers between the healthcare provider and patient (Renzaho et al., 2013). It produces holistic care that takes into consideration peoples' linguistic and cultural needs (Brach & Fraserirector, 2000; Jirwe et al., 2006; Suh, 2004). Additionally,

culturally competent care has the potential to positively impact the patient-provider interaction by improving communication, increasing trust and information-sharing, and enhancing rapport among the patient, family, and provider to build stronger therapeutic relationships (Brach & Fraserirector, 2000; Dudas, 2012; Saha et al., 2008). For healthcare providers, the practice of cultural competence allows for a greater awareness and respect for patient beliefs, values, preferences, and needs. It also helps in understanding patients' health-related behaviors and subsequent health outcomes (Brach & Fraserirector, 2000; Saha et al., 2008).

The provision of more appropriate services. Cultural competence also has potential for improving the efficiency of care by reducing unnecessary diagnostic testing and the incidence of medical errors which may occur due to misunderstandings and differences in language or culture (Anderson et al., 2003; Betancourt et al., 2003). This may in turn lead to the provision of more appropriate services such as: health screening and prevention activities undertaken with knowledge of potential risks; well-informed diagnoses; treatment options which take into consideration patients' cultural contexts; and patient-tailored education or treatment plans developed to improve the likelihood of adherence (Betancourt, Green, Carrillo, & Park, 2005; Brach & Fraserirector, 2000). By promoting and supporting patients' individual health practices in conjunction with western medicine, there are further opportunities for health promotion, illness prevention, and health restoration (Betancourt et al., 2003; Dudas, 2012). When appropriate services are provided, positive outcomes can also follow (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Brach & Fraserirector, 2000). These include improved health status

indicators, as well as increased health care satisfaction (Betancourt et al., 2005; Brach & Fraserirector, 2000; Dudas, 2012; Renzaho et al., 2013; Saha et al., 2008; Suh, 2004).

Measures of Cultural Competence

Despite decades of research on cultural competence and the development of numerous measures, health professions remain far from establishing valid and comprehensive methods for measuring culturally competent care across social and cultural diversity (Kumas-Tan, Beagan, Loppie, MacLeod, & Frank, 2007; Loftin, Hartin, Branson, & Reyes, 2013; Shen, 2015). The literature reveals a range of cultural competence evaluation methods for health professionals and providers, with one review by Kumas-Tan et al. (2007) identifying 54 distinct instruments. Kumas-Tan et al. (2007) identify the ten most frequently cited cultural competence measures: Multicultural Counseling Inventory (MCI); Cultural Self-Efficacy Scale (CSES); Inventory for Assessing the Process of Cultural Competence among health professionals (IAPCC and IAPCC-R); Cross-Cultural Adaptability Inventory (CCAI); Quick Discrimination Index (QDI); Culture Attitude Scale, or Ethnic Attitude Scale (CAS/ EAS); Multicultural Awareness, Knowledge, and Skills Survey (MAKSS and MAKSS-CE-R); Cultural Competence Self-Assessment Questionnaire (CCSAQ); Cross-Cultural Counseling Inventory (CCCI and CCCI-R); and Multicultural Counseling Knowledge And Awareness Scale, formerly the Multicultural Counseling Awareness Scale–form B (MCKAS).

Reviews of these existing cultural competence measures and others raise a number of concerns (Kumas-Tan et al., 2007; Loftin et al., 2013). They raise questions regarding their validity, with some who argue that many instruments oversimplify both

culture and cultural competence (Kumas-Tan et al., 2007). Others question the reliability of these instruments, considering that most consist primarily of self-evaluation tools developed without patient input (Burchum, 2002; Kumas-Tan et al., 2007). The widespread reliance on healthcare provider self-report measures excludes measures of culturally competent care from the patient's perspective, and leaves existing measures susceptible to social-desirability effects (Kumas-Tan et al., 2007; Shen, 2015). Including healthcare recipients in the evaluation process is the ideal approach to ascertain culturally competent care; however, only a limited number of instruments incorporating patient evaluations could be found in the literature (Burchum, 2002; Loftin et al., 2013).

Measuring Cultural Competence from the Patient Perspective

Five published instruments that measure culturally competence from the patient perspective are available for use and they are described in this section. These instruments include the: Public Perceptions of Physicians' Cultural Competence (PPPCC) scale; Client Cultural Competence Inventory (CCCI); Consumer Assessment of Healthcare Providers and Systems Cultural Competency Item Set (CAHPS-CC); Patient-Rating Provider Cultural Competency (PRPCC) measure; and Cultural Competency Measure.

The Public Perceptions of Physicians' Cultural Competence (PPPCC) scale.

Ahmed and Bates (2012) developed the PPPCC scale to assess patients' perception of physicians' culturally competent behaviours and to promote awareness of physician–patient intercultural interaction processes. The scale measures the influence of four dimensions of patients' perception of physicians' cultural competence on patient satisfaction with the clinical encounter: physician's global cultural competence (PGCC) and macro-cultural issues, PGCC related to proxemics/chronemics, PGCC related to

language issues, and physician's patient-centered cultural competence (PPCCC) (Ahmed & Bates, 2012; Ahmed, Bates, & Romina, 2016). In Appalachian Ohio, USA, three studies were conducted using the PPPCC scale to examine: gender differences in patients' perceptions of physicians' cultural competence (Ahmed & Bates, 2007); the relationship between patients' ethnocentric views and their perceptions of physicians' cultural competence in health care interactions (Ahmed & Bates, 2010); and the influence of patients' perceptions of physicians' cultural competence on patient satisfaction (Ahmed et al., 2016).

Findings revealed that individual differences rather than group differences had a greater influence on patients' perceptions of physicians' cultural competence (Ahmed & Bates, 2007). In order to provide culturally competent care, however, physicians are required to make efforts to balance their treatment of patients as individuals and as members of a group (Ahmed & Bates, 2010). Furthermore, findings show that Appalachian patients recognize physicians as culturally competent and feel more satisfied with care when physicians value patients' perspectives (Ahmed et al., 2016). More specifically, patients reported higher rates of satisfaction when physicians made an attempt to understand their feelings and emotions, and asked about their perspective on illness and their goals regarding treatment (Ahmed et al., 2016).

The PPPCC scale is a five-factor measure of patient perceptions of physicians' cultural competence as it relates to patient satisfaction, and is an overall good-quality and valid scale (Ahmed & Bates, 2012). Although its research was carried out thoroughly, the instrument may lack cross-cultural validity as all phases of the research and scale development took place in Appalachian Ohio, where the population is predominantly

“European American and White” (Ahmed & Bates, 2012). Another limitation of the PPPCC scale is that most items focus on patient perceptions of “doctors wanting to know” cultural information about them (Ahmed & Bates, 2012). The practice of seeking knowledge about, being aware of, and recognizing individual cultural differences is important, however, it does not necessarily equate to physicians being culturally competent (Ahmed & Bates, 2012).

The Client Cultural Competence Inventory (CCCI). The CCCI is a 12-item self-report measure that assesses a client’s perception of the cultural competency of mental health services (Switzer, Scholle, Johnson, & Kelleher, 1998). Eight items were used in a study by Damashek, Bard, and Hecht (2012) to examine the relationships between service type, client satisfaction, perceived provider cultural competence, and goal completion of in home-based services to treat child abuse and neglect. A manualized evidence-based treatment for child neglect was compared to the usual provision of services in a child welfare population (Damashek et al., 2012). Results of the study indicated that clients’ perceptions of cultural competence were a key factor in improving clients’ satisfaction with and engagement in services, and that manualized treatments for child abuse and neglect are perceived as more effective, helpful, and culturally sensitive by clients than non-manualized services for maintaining engagement in services (Damashek et al., 2012).

Although Switzer et al. (1998) set out to develop a global measure of cultural competence that could be applied to multiple ethnic population subgroups, the measure’s main focus is on the assessment of cultural competence in mental health care delivery systems.

The Consumer Assessment of Healthcare Providers and Systems Cultural Competency (CAHPS-CC) item set. The CAHPS-CC item set is a 34-item supplement to the CAHPS surveys, developed by the Agency for Healthcare Research and Quality (AHRQ) as a patient-administered assessment of health care quality in diverse settings (Stern et al., 2012). The survey is designed to assess the extent to which patients consider their care to be culturally competent, reasoning that patients' assessments will be more closely related to health outcomes than provider assessments (Stern et al., 2012). The most recent version of the item set addresses five domains: (1) patient-provider communication; (2) complementary and alternative medicine; (3) experiences of discrimination due to race/ethnicity, insurance, or language; (4) experiences leading to trust or distrust, including level of trust, caring, and truth-telling; and (5) linguistic competency and access to language services (AHRQ, 2012). This item set simplified the previous survey domains and added items in other domains of cultural competency that were not adequately assessed beforehand (AHRQ, 2012). In addition, the revised item set now assesses 'provider' rather than 'doctor' cultural competency.

The original CAHPS-CC item set consisted of 26 items and measured eight aspects of culturally competent care: doctor communication-positive behaviors; doctor communication-negative behaviors; doctor communication-health promotion; doctor communication-alternative medicine; shared decision; equitable treatment; trust; and access to interpreter services (Carle, Weech-Maldonado, Ngo-Metzger, & Hays, 2012). This version of the item set was used most frequently in research, with findings to be discussed in the text that follows.

CAHPS-CC was administered as part of the Immigration, Culture, and Health Care (ICHC) study, a cross-sectional study investigating factors that impact diabetes self-management and health outcomes in vulnerable populations (Stern et al., 2012). Stern et al. (2012) performed confirmatory factor analysis and internal consistency reliability analysis of the CAHPS-CC survey among 600 patients with type 2 diabetes receiving primary care in safety-net clinics using the original 7-factor model. All CAHPS-CC domains were significantly and positively associated with global physician rating, with a single-point increase in scores on two domains (doctor communication-positive behaviors and trust) (Stern et al., 2012). Their results indicated that select CAHPS-CC domains were suitable for broad-scale administration among safety-net patients (Stern et al., 2012).

In a study by Fernandez, Seligman, Quan, Stern, and Jacobs (2012), the CAHPS-CC was used to examine the relationships between three core aspects of culturally competent care (doctor communication-positive behaviors, trust, and doctor communication-health promotion) and glycemic, lipid, and blood pressure control among ethnically diverse patients with diabetes. Results indicated that trust in physician, a core component of culturally competent care, but not doctor communication behavior, was associated with a lower likelihood of poor glycemic control (Fernandez et al., 2012). None of the aspects of culturally competent care examined, however, were associated with lipid or systolic blood pressure control (Fernandez et al., 2012). A study by Weech-Maldonado et al. (2012) also provided support for the psychometric properties of the CAHPS CC item set in general, particularly for the English version of the survey. Weech-Maldonado et al. (2012) evaluated the reliability and validity of the CAHPS-CC

item set using 2008 survey data. They assessed the internal consistency of the earlier 7-factor CAHPS CC scale using Cronbach alphas, and examined the validity of the measures using exploratory and confirmatory factor analysis, multitrait scaling analysis, and regression analysis (Weech-Maldonado et al., 2012).

The CAHPS Clinician and Group Survey (CG-CAHPS) is identified as the standard for collecting and reporting information about patients' experiences of care in the USA (Quigley, Martino, Brown, & Hays, 2013; Stern et al., 2012). With its surveys, the CG-CAHPS also intends on providing comparative information on individual clinicians and providers, practice sites, medical groups, health systems, and other organized systems of care, to facilitate consumer choice, and to inform and guide quality improvement (Quigley et al., 2013). Furthermore, the CG-CAHPS provides a comprehensive set of instructional materials that address preparing for and implementing the surveys, analyzing data, constructing composite measures, and reporting results (AHRQ, 2012). Overall, the CAHPS-CC is a valid and reliable supplemental item set to the CG-CAHPS, with adequate measurement properties, and items that can be used to assess culturally competent care from the patient perspective (Weech-Maldonado et al., 2012).

The Patient-Reported Provider Cultural Competency (PRPCC) scale. Thom and Tirado (2006) introduced parallel survey instruments designed to measure patient-reported and provider self-reported cultural competence: Patient-Reported Provider Cultural Competency (PRPCC) scale and Provider Self-Assessment of Cultural Competency (PSACC). The measures were developed to examine the relationship between cultural competency, care processes, and outcomes of care (Thom & Tirado,

2006). The measures were validated in a group of 429 adult primary-care patients with diabetes and/or hypertension and their corresponding primary care providers (Thom & Tirado, 2006). The PRPCC found provider cultural competence predictive of a decrease in blood pressure among hypertensive patients ($p < .05$), but no statistically significant reduction of glycosylated hemoglobin (Thom & Tirado, 2006). Also worth noting was the lack of association between providers' and patients' reports of provider behaviors, suggesting that provider self-assessment of culturally competent behaviors cannot be used as a substitute for patient-reported cultural competency (Thom & Tirado, 2006). Moreover, patient-reported provider cultural competency was found to be more strongly associated with processes and outcomes of care than provider self-reports of culturally competent behaviors (Thom & Tirado, 2006).

Although the PRPCC is a validated measure with good internal validity according to Thom and Tirado (2006), its items measure “doctor” behaviors and “general” communication techniques considered to be specific to cultural competency.

The Cultural Competency Measure. The Cultural Competency Measure is a 9-item patient report measure of provider cultural competency designed to inform research across a range of clinical and cultural contexts (Lucas, Michalopoulou, Falzarano, Menon, & Cunningham, 2008). The measure was used by Hooper and Huffman (2014) to examine the relationships between depressive symptoms, well-being, patient involvement, provider cultural competency, and treatment non-adherence among 243 university student-patients. Findings revealed that all four variables (depressive symptoms, well-being, patient involvement, and cultural competency) were significantly associated with adherence to providers' recommendations (Hooper & Huffman, 2014).

The measure was used for a second time by Michalopoulou et al. (2014) to examine the relationship between patients' perception of provider cultural competency and functional health outcomes. The results indicated that trust, respect, and communication are important variables that mediate the relationship between providers' cultural competency and patients' functional outcomes. Patients who rated their providers as highly culturally skilled had higher "process of care", satisfaction, and functional outcome scores (Michalopoulou et al., 2014).

The measure was also used by Michalopoulou, Falzarano, Arfken, and Rosenberg (2009) to determine the association between African American patients' perceptions of physician cultural competency and patient satisfaction with their visit. The results revealed that there was a significant positive association between patients' perceptions of physicians' cultural competency and satisfaction with the visit, even when controlling for other variables such as patient physician communication, patient participation during the visit, patient-physician race concordance, regular doctor, clinic, wait time of visits, and test results (Michalopoulou et al., 2009). As satisfaction has been consistently shown to be associated with improved clinical outcomes, the findings suggest that by enhancing the quality of health care delivery so that it is considerate of patient culture, clinical outcomes may also improve (Michalopoulou et al., 2009). In turn, this improvement may contribute to a reduction in health disparities (Michalopoulou et al., 2009).

Although the Cultural Competency Measure provides a standardized tool for use in multiple clinical and cultural contexts, the 9-item measure barely scratches the surface when it comes to comprehensively assessing provider cultural competency (Lucas et al., 2008). The tool merely asks for patients' opinions regarding how aware, knowledgeable

and understanding they feel their “doctor” is regarding their specific culture, heritage, and ethnicity (Lucas et al., 2008).

In spite of beginning progress towards the consideration and measurement of health care provider cultural competence and its effect on patient outcomes, such as patient satisfaction and clinical outcomes, there remains a significant gap in the literature adequately addressing this link (Shen, 2015).

Cultural Competence and Immigrant Populations

Cultural competence is recognized as a key component to adequately serving immigrants in the health care sector (Kalich, Heinemann, & Ghahari, 2016). However, studies on the outcomes of cultural competence specific to immigrant populations are lacking in the literature (Shen, 2015). Of the seven studies found examining cultural competence among immigrant populations specifically, all were qualitative in nature. Additionally, only two of these seven studies were based on immigrant patients’ perspectives, in which no measures to assess patients’ perceptions of providers’ cultural competence were used. Furthermore, none of these studies were of immigrants in Canada, pointing to a significant gap in the literature. The two qualitative studies which examine cultural competence from the immigrant patient perspective are discussed briefly below.

Maleku and Aguirre (2014) conducted a qualitative interpretive meta-synthesis (QIMS) to describe the lived experience of immigrants accessing health care to understand the meaning of cultural competence through their lens. The findings provide insight on “expanding the definition of culturally competent health care beyond language, behaviors, attitudes, and policies” (Maleku & Aguirre, 2014, p. 561). Maleku and

Aguirre (2014) suggest integrating the concepts of cultural competence and patient-centered care into a holistic concept in order to enhance patient centeredness, eliminate health disparities, and improve overall health care quality across all cultures, including the majority culture.

Rogers-Sirin, Melendez, Refano, and Zegarra (2015) designed a study to gather client-level data from immigrant college students who had been in therapy regarding their perceptions of their therapists' cultural competence. The study used a modified Consensual Qualitative Research (CQR) approach and a semi-structured interview protocol consisting of 20 questions regarding the students' experiences in psychotherapy. Rogers-Sirin et al. (2015) hypothesized that if the student perceived their therapist to be culturally competent, this could lead to feelings of relief, comfort, and greater assurance in the therapist's ability to help them, despite cultural differences.

The results demonstrate, however, that the immigrant students were more likely to experience culturally incompetent behaviours and interactions (Rogers-Sirin et al., 2015). A noteworthy finding was that some participants encountered forms of incompetence that were not necessarily linked to discriminatory attitudes toward immigrants, but indicated "a lack of understanding of the unique needs immigrant clients may have, or a lack of the necessary skills to meet these needs" (Rogers-Sirin et al., 2015, p. 264).

With several gaps being addressed in the literature, the proposed study attempts to explore the impact of cultural competence on health-related outcomes among immigrants in the region, in order to find ways to better meet this growing populations' evolving needs. The following chapter will describe the methods used in this study.

CHAPTER 3

METHODOLOGY

This chapter discusses the research design, sample and setting, ethical considerations, data collection, instruments, variable definitions, and data screening and analysis procedures.

Research Design

A descriptive, cross-sectional design was used for the proposed study. Cross-sectional research involves the analysis of data collected from a population, or a representative subset, at a specific point in time (Creswell, 2014). The primary purpose of this study is to explore the impact of patient perceptions of provider cultural competence on health-related quality of life among an immigrant population in Southwestern Ontario. The secondary purpose of this study is to explore the impact of patient perceptions of provider cultural competence on health care satisfaction among this population.

Sample and Setting

A convenience sample was used to obtain self-report data and achieve the study's purpose. The target population consisted of those who: (a) immigrated to Canada within the last 5 years; (b) were 18 years of age or older; and (c) were residing in Windsor and Essex County. Based on a confidence level of 95% and 5% margin of error, G-Power 3.1 indicated an estimated sample size of 89 participants. Study participants were recruited from English language classes at the New Canadians' Centre of Excellence Inc. (NCCE) and the Multicultural Council (MCC) of Windsor and Essex County.

Ethical Considerations

Approval for the study was sought from the Research Ethics Board (REB) of the University of Windsor. Written permissions to allow research to take place on site was solicited from each participating organization and submitted to the REB prior to data collection. Individuals who met inclusion criteria were invited to participate.

Participants were given copies of the letter of information prior to participating in the study. The student investigator gathered informed consent, and the letter of information was kept by participants for future reference. The forms were prepared with attention to appropriate literacy level, and included information regarding the investigators, purpose of the study, procedures, potential risks, benefits, and measures to mitigate risks and protect confidentiality. Sufficient time was allotted to answer all participant questions regarding the study. Efforts were also made to provide volunteer interpreters to assist with survey completion for participants with limited English proficiency.

Participants were informed that they could withdraw at any point during the survey, but that withdrawal would not be possible once the surveys were completed as no identifiers were collected. Following collection, data were coded and stored in a locked cabinet, accessible only to the student investigator and her advisor. The hard data were inputted into the SPSS Version 22 database for data analysis, and stored on a password protected computer. Once the data were analyzed, the hard data were destroyed by shredding.

Variable Definitions & Instrumentation

The conceptual and operational definitions of the variables used in this study are described below. The variables are organized according to the study's conceptual

framework, Cox's (1982) Interaction Model of Client Health Behaviour (IMCHB). Described in greater detail in Chapter 1, the IMCHB consists of three major elements: client singularity, client-professional interaction, and health outcomes (Cox, 1986). In effect, the model helps to identify and explain relationships between client singularity, the client-provider relationship, and subsequent client health care behavior and health outcomes (Cox, 1982). An operationalized version of the model is presented in Figure 4.

Demographics

Demographics are the statistical data or characteristics of a population. According to Cox (1982), background variables such as the client's demographic characteristics and previous health care experience are elements of client singularity, and interact over time within each client to influence specific health behaviors (p. 49). A demographic questionnaire was developed for the present study to gather personal information such as: age, gender, marital status, dependent children, level of education, employment status, household income, country of origin, and length of time in Canada.

Healthcare Provider Cultural Competence

Cultural competence is defined as the "ongoing capacity of healthcare systems, organizations, and professionals to provide for diverse patient populations high-quality care that is safe, patient and family centered, evidence based, and equitable" (National Quality Forum, 2008, p. 2). Cultural competence is also defined as "the process in which the healthcare provider continuously strives to achieve the ability to effectively work within the cultural context of a client" (Campinha-Bacote, 1999, p. 203). The provision of culturally competent care is aimed at reducing health disparities among diverse populations (Weech-Maldonado et al., 2012). While disparities in health care arise from

a number of factors at various levels – including those at the client, healthcare provider, and healthcare system level – healthcare providers often bear a greater responsibility for these disparities due to their direct involvement in the health care encounter (Srivastava, 2007, p. 9). In the present study, healthcare provider cultural competence was measured using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Cultural Competency (CC) item set.

CAHPS Cultural Competence item set. The CAHPS-CC Item Set is a 34-item supplement to the CAHPS Clinician & Group (CG-CAHPS) Survey used to assess culturally competent care from the patient’s perspective (AHRQ, 2012). Developed by the Agency for Healthcare Research and Quality (AHRQ), the CG-CAHPS Survey is a patient-administered assessment of health care quality in diverse settings (Stern et al., 2012). CAHPS surveys go beyond providing patient satisfaction ratings by evaluating patients’ actual experiences with health care services (Clancy, Brach, & Abrams, 2012). These evaluations provide important information on how well providers meet the needs of the patients they serve (Weech-Maldonado et al., 2012). Over the years, the CAHPS surveys evolved into a set of standardized item sets used to collect reliable information from patients about their health care experiences (Weech-Maldonado et al., 2012). Supplemental item sets include: Cultural Competence (CC); Communication with Providers (PC); Health Literacy (HL); Health Promotion & Education (HP); and Patient-Centred Medical Home (PCMH) item sets (Clancy et al., 2012). Only the Cultural Competence (CC) item set was used for the present study.

The CAHPS-CC measure for obtaining the patient’s perspective on culturally competent care is guided by a comprehensive review of the literature on health care

quality among diverse populations in the United States (Weech-Maldonado et al., 2012), and a conceptual framework by Bethell, Carter, Latzke, and Gowen (2003). In this framework, patients' health care experiences are examined in the context of their encounters with providers within the health care system (Weech-Maldonado et al., 2012). Thus, a combination of patient, provider, and health care system factors affect quality of care (Weech-Maldonado et al., 2012).

The development of the CAHPS-CC item set involved five steps: (a) evaluating existing CAHPS survey items to identify relevant ones that addressed the cultural competency domains of interest; (b) conducting a review of the literature to identify existing instruments or item sets on cultural competency from the patient's perspective; (c) placing a Federal Register notice with a call for measures; (d) reviewing and adapting these measures; (e) and creating additional items as needed for each of the proposed domains (Carle, Weech-Maldonado, Ngo-Metzger, & Hays, 2012; Weech-Maldonado et al., 2012). Survey items then underwent extensive cognitive interviewing, field testing, and rigorous translation into Spanish (the only other language aside from English for which the CAHPS-CC survey is available) (Stern et al., 2012). For the present study, the English version of the CAHPS-CC item set was used. A study by Weech-Maldonado et al. (2012) provides support for the psychometric properties of the CAHPS-CC item set in general, particularly for the English version of the survey.

Weech-Maldonado et al. (2012) evaluated the reliability and validity of the CAHPS-CC item set using 2008 survey data. They assessed the internal consistency of the earlier 7-factor CAHPS CC scale using Cronbach alphas, and examined the validity of the measures using exploratory and confirmatory factor analysis, multitrait scaling

analysis, and regression analysis (Weech-Maldonado et al., 2012). Overall, the CAHPS-CC was found to be a valid and reliable supplemental item set to the CG-CAHPS, with adequate measurement properties, and items that can be used to assess culturally competent care from the patient perspective (Weech-Maldonado et al., 2012).

The CAHPS-CC Item Set addresses the following five domains: (1) patient-provider communication; (2) complementary and alternative medicine; (3) experiences of discrimination due to race/ethnicity, insurance, or language; (4) experiences leading to trust or distrust, including level of trust, caring, and truth-telling; and (5) linguistic competency and access to language services (AHRQ, 2012). Select elements from Cox's (1982) IMCHB are addressed through the CAHPS-CC domains. These include: previous health care experience (an element of client singularity); and health information and affective support (elements of client-professional interaction).

Previous health care experience. This element of client singularity was assessed using the CAHPS-CC domains of experiences of discrimination due to race/ethnicity, insurance, or language (items 14-15, 24), and linguistic competency and access to language services (items 22-34) (AHRQ, 2012). In terms of access to language services, interpreter use was examined.

Health information. Health knowledge or information can often be viewed as a form of power in the patient-provider relationship (Mathews et al., 2008). Health information can be used to set health-related goals, inform patients regarding the severity of a health problem, or promote adherence to a treatment plan (Mathews et al., 2008). Health information should be useful, and patients must be able to process and apply this information (Mathews et al., 2008). This element was assessed through the CAHPS-CC

domains of patient-provider communication (items 1-8), and complementary and alternative medicine (items 9-13) (AHRQ, 2012).

Affective support. According to Mathews et al. (2008), affective support involves meeting the patient at the same emotional level (Cox, 1982). Cox emphasizes that the two extremes, ignoring affective support or overwhelming a patient by lending too much affective support, both result in patient withdrawal and dissatisfaction (Mathews et al., 2008). The element of affective support was assessed by items within the CAHPS-CC that measure the domain of trust, caring, and truth-telling (items 16-21) (AHRQ, 2012). Overall trust in health care provider was also explored.

Health-related Quality of Life

The WHO defines Quality of Life (QOL) as “an individual’s perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (Skevington, Lotfy, & O’Connell, 2004). In measuring QOL, the WHOQOL Group (1998) considers how satisfied or dissatisfied people are with important aspects of their lives, recognizing that this interpretation will be a highly subjective and individual matter (Skevington et al., 2004). In the present study, health-related QOL was assessed using the WHOQOL-BREF.

WHOQOL-BREF. The WHOQOL-BREF is a 26-item abbreviated version of the WHOQOL-100 quality of life assessment (WHOQOL Group, 1998). It is a person-centered, multilingual instrument used for the subjective assessment of well-being. The instrument consists of socio-demographic and health status questions, and produces

scores for four domains related to quality of life (QOL): physical health, psychological, social relationships and environment (Skevington et al., 2004; WHOQOL Group, 1998).

The physical health domain includes items 3, 4, 10, and 15-18, and covers topics that explore: energy and fatigue; pain and discomfort; sleep and rest; work capacity; mobility; activities of daily living; and dependence on medicinal substances and medical aids (WHO, 2004). Topics covered in the psychological domain (items 5-7, 11, 19, and 26) include: bodily image and appearance; positive and negative feelings; self-esteem; spirituality, religion, and personal beliefs; and thinking, learning, memory and concentration (WHO, 2004). The social relationships domain consists of items 20-22, and covers the topics of social support and personal relationships (WHO, 2004). Under the environmental domain (items 8, 9, 12-14, 23-25), topics covered include: financial resources; freedom, physical safety and security; health and social care accessibility and quality; home environment; physical environment; transportation; participation in recreation and leisure activities; and opportunities for acquiring new information and skills (WHO, 2004).

The WHOQOL-BREF arose from a decade of developmental research on QOL and health care (Skevington et al., 2004). The instrument's psychometric properties were analyzed using cross-sectional data obtained from a survey of adults carried out in 23 countries (n = 11,830) (Skevington et al., 2004). Sick and well respondents were sampled from the general population, as well as from hospital, rehabilitation and primary care settings, serving patients with physical and mental health disorders (Skevington et al., 2004).

Analyses of internal consistency, item–total correlations, discriminant validity and construct validity through confirmatory factor analysis indicate that the WHOQOL-BREF has good-to-excellent psychometric properties of reliability, and performs well in preliminary tests of validity (Skevington et al., 2004). The instrument has also been shown to display good discriminant validity, content validity and test-retest reliability (WHOQOL Group, 1998). Moreover, the WHOQOL-BREF adequately assesses domains relevant to quality of life across a number of languages and cultures globally (WHOQOL Group, 1998). Overall, results indicate that the WHOQOL-BREF is a sound, cross-culturally valid and reliable measure of health-related QOL (Skevington et al., 2004; WHOQOL Group, 1998).

For the purpose of this study, only two of Cox’s (1982) five elements of health outcome will be assessed. The IMCHB health outcome elements presume a health behavior or health state that results from a particular behavior (Mathews et al., 2008). Clinical health status indicators will be assessed as the primary outcome in this study and satisfaction with care will be explored as a secondary outcome.

Clinical health status indicators. The variable of health-related QOL falls under the IMCHB health outcome element of clinical health status indicators. Health status indicators represent health outcomes, and include subjective or objective health information (Mathews et al., 2008).

Satisfaction with Care. According to Mathews et al. (2008), satisfaction with care is not a behavioral measure, however, it can be indicative of subsequent behavior. An item addressing overall satisfaction with health care received will be developed by the author and included under this element.

Data Collection

The collection of data for this study began in September of 2017, following clearance from the REB of the University of Windsor and approval from settings in which participants would be recruited. Initially, emails were sent out to various organizations, institutions, and agencies who work with new immigrants for permission to recruit participants from their users and clientele. Once permission was granted, dates and times were arranged for the investigator and trained research assistants to distribute and collect surveys among eligible participants. For participants with limited English proficiency, volunteer interpreters assisted with survey completion. Participant recruitment continued until the required sample size was achieved.

Data Screening and Analysis

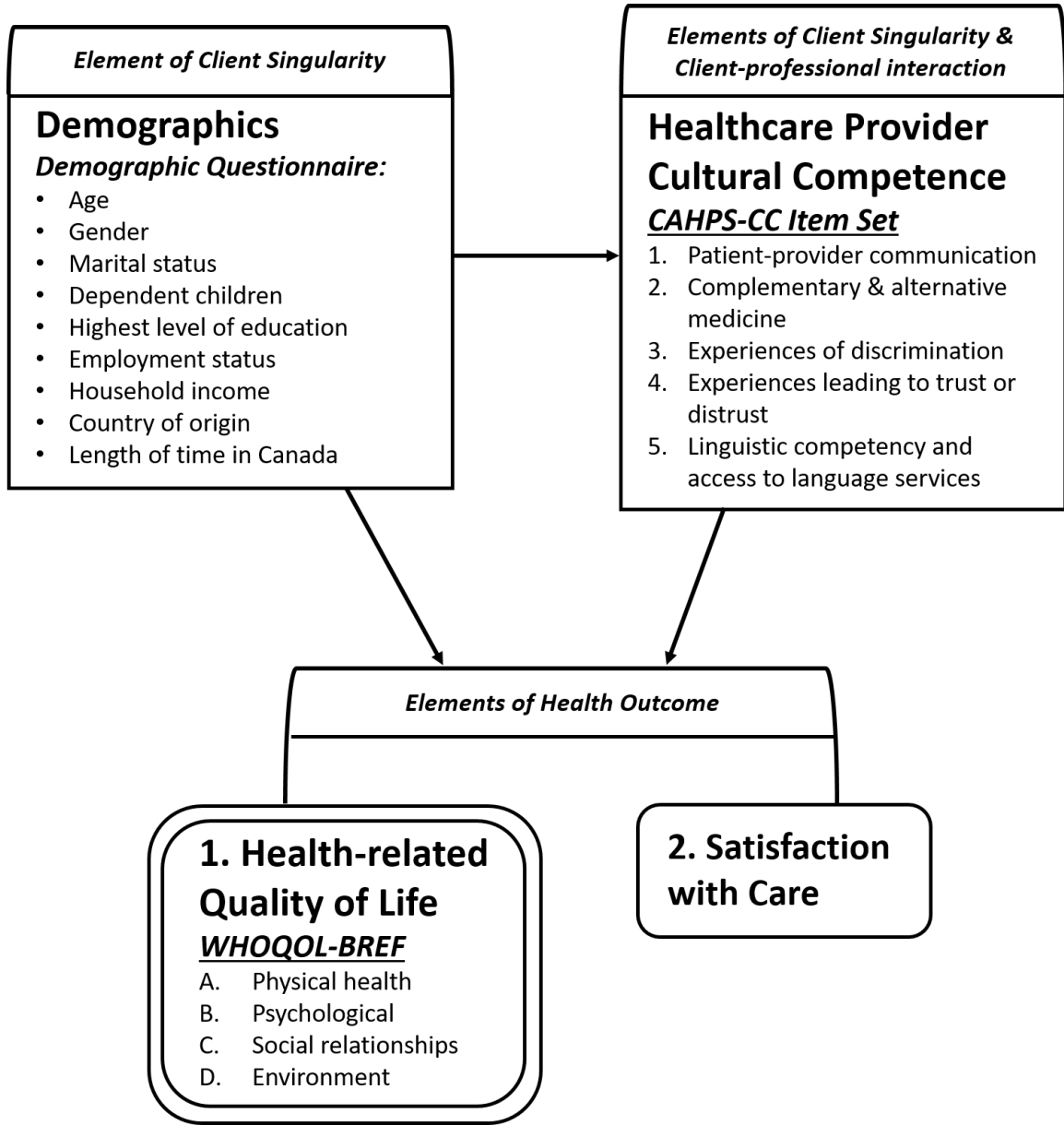
All data was analyzed using the Statistical Package for the Social Sciences (SPSS) Version 22 software. Prior to data analysis, data was screened for issues with missing data, outliers, multicollinearity, singularity and normality. A two-tailed alpha of .05 and/or 95% CI was used to determine the significance of statistical findings. Descriptive statistics were used to summarize sample characteristics. Univariate statistical procedures (Pearson moment correlation and one-way analysis of variance) were used to examine the crude associations between the primary and secondary outcomes and each of the study variables. Stepwise linear regression analysis was performed to determine

which variables predict health-related quality of life and satisfaction with care among participants. Only variables with significant associations at a liberal $\alpha \leq .25$ were entered into the regression analyses (Hosmer & Lemeshow, 2001).

Pearson moment correlation is a statistical technique used to examine the correlation or relationship between two continuous variables (El-Masri, 2016a). It is based on the assumptions that the sample is truly representative of the population of interest, and that the correlated variables have a normal distribution (El-Masri, 2016a). One-way analysis of variance (ANOVA) is a technique used to determine whether there are any statistically significant differences between the means of two or more independent groups or variables on an outcome variable (Lund Research Ltd., 2013).

Stepwise linear regression procedures explore which independent variables explain the dependent variable. This analysis is performed on SPSS by building a regression model and entering variables into the model, in a stepwise manner, until no more variables are needed to be entered (The Pennsylvania State University, 2018). A step-wise approach to the linear regression was used as the technique is mathematically-driven and exploratory in nature. The technique yields a parsimonious model that achieves a desired level of explanation with the fewest number of variables (El-Masri, 2016b).

Figure 4. An operationalized model of the study variables



CHAPTER 4

RESULTS

This chapter discusses the results of the statistical analyses conducted to answer the proposed research questions. A description of the data screening and preparation process is provided, followed by a summary of data analysis procedures. The findings are organized in sections, beginning with sample characteristics, and followed by the results of the two research questions.

Data Screening and Management

Prior to analysis, the database was screened for missingness, outliers, and normality. Simple frequencies and descriptive statistics were conducted to screen for missing data. Of the 149 surveys collected, 18 cases had more than 20% missing data on the survey items and were therefore deleted (El-Masri & Fox-Wasylyshyn, 2005). Another 14 cases were deleted as they did not meet inclusion criteria of residing in Canada for five years or less. This yielded a final sample size of 117. Of the 78 items surveyed, 73 items had at least one missing value, with a total of 250 missing data. The data were deemed to be missing at random, therefore sample mean substitution was used. This technique allows for retention of sample size and maintenance of statistical power, and involves replacing a missing value on an item with the sample mean of available data for that item (El-Masri & Fox-Wasylyshyn, 2005).

Demographic variables. Ten demographic variables were explored as independent variables in this study. They included: age, gender, marital status, having dependent children at home, number of children, household income, level of education, employment status, length of time in Canada, and having a regular or primary health care

provider. Among the continuous variables, 'age' was found to be non-normally distributed. Log10 transformation was successful in achieving normality. Although the statistical plan intended to treat ordinal variables as continuous variables (i.e. marital status, household income, level of education, employment status), statistical screening revealed 'marital status', 'household income', and 'employment' to be non-normally distributed. These variables were dichotomized prior to data analysis.

CAHPS-CC. CAHPS-CC items were grouped to create four domains: (1) *patient-provider communication*, (2) *complementary and alternative medicine*, (3) *experiences of discrimination*, and (4) *trust, caring, and truth-telling*. These domains were considered independent variables in the analysis. 'Interpreter use' and 'overall trust in provider' were measured using single items of the CAHPS-CC (questions 25 and 21, respectively). Negatively phrased items were reverse coded prior to analysis. The first eight items of the CAHPS-CC make up the domain of *patient-provider communication*. Measured on a 4-point scale, the mean of these items was then calculated to yield an overall domain score. This variable was normally distributed so treated as a continuous variable in the analysis. *Complementary and alternative medicine* (CAM) was measured using CAHPS-CC items 9 through 13. These CAHPS-CC items are dichotomous statements (yes/no) that were averaged to measure participant views about health care provider assessment/support of CAM. Items 14, 15, and 24 were used to measure *experiences of discrimination* due to race/ethnicity, insurance, or language, and ranked on a 4-point scale. The mean was calculated to create an overall measure of discrimination. This variable was non-normally distributed. Log10 transformation was unsuccessful, therefore it was dichotomized (0 = no discrimination experienced; 1 = discrimination

experienced). *Trust, caring and truth-telling* was measured by computing the mean scores of items 16 through 20 (ranked on a 3-point scale), and it was treated as a continuous variable due to normal distribution. *Overall trust in provider* was measured by the question 21 of the CAHPS-CC. Due to extreme negative skewness, this variable was dichotomized as 0 (does not trust provider) and 1 (trusts provider).

WHOQOL-BREF. The WHOQOL-BREF was used to measure the primary outcome in this study, health-related quality of life (QOL). The items in the WHOQOL-BREF were prepared for analysis using the procedures provided in the instrument's scoring instructions (World Health Organization, 1996). To meet the assumptions of the statistical tests, all WHOQOL items were screened for normality and linearity (histograms, box plots, Fisher's exact test) prior to analysis. The WHOQOL measures four domains (physical health, psychological, social relationships, and environment), and the mean score of items within each domain is used to calculate the domain score (World Health Organization, 1996). Prior to calculating these scores, three negatively phrased items (3, 4, 26) were reverse coded (World Health Organization, 1996). Mean scores were multiplied by 4 in order to make domain scores comparable with the scores used in the original WHOQOL-100 (World Health Organization, 1996). Items 1 and 2 are not included in any of the domain scores.

The WHO suggests that all four domains should be taken into consideration when evaluating overall QOL, and a total QOL score derived by summing data from all WHOQOL-BREF items is not recommended (World Health Organization, 1998). In this study, an average score of all four WHOQOL-BREF domains was computed as an exploratory measure of overall QOL. Cronbach's alphas for the four domains are as

follows: physical health (7 items; $\alpha = .502$); psychological (6 items; $\alpha = .544$); social relationships (3 items; $\alpha = .558$); environment (8 items; $\alpha = .817$). The overall QOL score was made up of 4 domain scores ($\alpha = .843$). Altogether, the WHOQOL-BREF consisted of 26 items and had a Cronbach's alpha of .887.

Sample Characteristics

The final sample included 117 participants who were enrolled in English language classes at two community organizations that provide support for newcomers in Windsor and Essex County – the New Canadians' Centre of Excellence Inc. (NCCE) and the Multicultural Council (MCC). For study participants, the mean length of time living in Canada was 26 months ($SD \pm 15.64$). Mean sample age was 40 years, with 84.6% of participants reported being married or in a common law/partnered relationship ($n = 99$). Over half of the participants (52.9%; $n = 62$) reported having an undergraduate or graduate university degree (45.2% and 7.7%, respectively), and 75.2% of participants reported being unemployed ($n = 88$).

With regards to health care utilization, 87.2% of participants reported having a primary or regular healthcare provider ($n = 102$) and 84.6% of participants visited a health care provider in the last six months ($n = 99$). In terms of number of visits to primary care providers in the last twelve months, 41.9% of participants reported one to two visits ($n = 49$), 24.8% reported three to four visits ($n = 29$), and another 24.8% reported over five visits ($n = 29$). Number of visits to walk-in clinics were also high, with 36.8% of participants visiting one to two times ($n = 43$), and 31.6% of participants visiting over three times ($n = 37$). Almost one third of participants visited the emergency department or an urgent care clinic in the last twelve months ($n = 34$).

As assessed by item 22 in the CAHPS-CC scale, fifteen languages were reported as participants' preferred language. The top five languages reported include: Arabic (n = 44; 37.6%), English (n = 41; 35%), Chinese (n=6; 5.1%), French (n = 5; 4.3%), and Spanish (n = 4; 3.4%). Additionally, thirty-one countries of origin were reported, with approximately half the sample originating from Syria (n = 30; 25.6%) and Iraq (n = 29; 24.8%). A summary of sample characteristics is presented in Table 1.

Table 1. *Sample Characteristics*

Variable	Distribution
Age (in years) [m (SD)]	40.26 (13.17)
Time in Canada (in months) [m (SD)]	26.02 (15.64)
Number of children [m (SD)]	1.41 (1.53)
Gender [n (%)]	
Male	22 (18.8)
Female	95 (81.2)
Marital status [n (%)]	
Single, never married	11 (9.4)
Married or common law	99 (84.6)
Separated or divorced	5 (4.3)
Widowed	2 (1.7)
Dependent children at home [n (%)]	
Yes	76 (65)
No	41 (35)
Education [n (%)]	
Less than high school	18 (15.4)
High school or equivalent	25 (21.4)
Community college/diploma	12 (10.3)
University degree	53 (45.2)
Graduate degree	9 (7.7)
Employment status [n (%)]	
Full-time	9 (7.7)
Part-time	9 (7.7)
Casual	3 (2.6)
Unemployed	88 (75.2)
Retired	8 (6.8)
Household income [n (%)]	
Less than \$35,000	92 (78.7)
\$35,000-\$50,000	15 (12.8)
\$51,000-\$75,000	2 (1.7)
More than \$75,000	8 (6.8)
Primary/Regular HCP [n (%)]	
Yes	102 (87.2)
No	15 (12.8)

N=117; n = number of respondents; m = mean; SD = standard deviation.

Research Question #1: Health-related QOL

Do patients' perceptions of healthcare provider cultural competence predict health-related quality of life among immigrant populations?

Preliminary Unadjusted Univariate Analyses

Univariate comparisons are reported for four quality of life (QOL) domains (physical health, psychological, social relationships, and environment), as well as for overall QOL. One-way ANOVA analyses and Pearson correlations were performed at the univariate level. Please refer to Table 2 and Table 3. Independent variables with significant associations at a liberal alpha of $\leq .25$ were entered into the linear regression analyses (Hosmer & Lemeshow, 2001).

Physical health. In terms of *physical health*, the following independent variables were significant at an alpha of $\leq .25$: overall trust in provider ($F = 3.738$; $p = .056$), experiences of discrimination ($F = 3.736$; $p = .056$), trust, caring and truth-telling ($r = .114$; $p = .219$), age ($r = -.184$; $p = .047$), marital status ($F = 5.401$; $p = .022$), dependent children at home ($F = 3.320$; $p = .071$), and number of children ($r = -.285$; $p = .002$).

Psychological. The following independent variables were found to have a significant association with *psychological* QOL at an alpha of $\leq .25$: experiences of discrimination ($F = 11.059$; $p = .001$), patient-provider communication ($r = .230$; $p = .013$), trust, caring and truth-telling ($r = .213$; $p = .021$), age ($r = -.189$; $p = .041$), education ($F = 1.717$; $p = .151$), and marital status ($F = 4.279$; $p = .041$).

Social relationships. The following variables had significant associations with *social relationships* at an alpha of $\leq .25$: experiences of discrimination ($F = 3.549$; $p = .062$), interpreter use ($F = 2.032$; $p = .157$), patient-provider communication ($r = .111$; $p = .288$), and number of children ($r = -.285$; $p = .002$).

= .234), age ($r = -.278$; $p = .002$), dependent children at home ($F = 2.196$; $p = .141$), and number of children ($r = -.145$; $p = .119$).

Environment. Independent variables demonstrating a significant association with *environment* at an alpha of ≤ 0.25 include: experiences of discrimination ($F = 29.211$; $p < .001$), patient-provider communication ($r = .276$; $p = .003$), interpreter use ($F = 7.092$; $p = .009$), trust, caring, and truth-telling ($r = .232$; $p = .012$), overall trust in provider ($F = 5.321$; $p = .023$), age ($r = -.154$; $p = .098$), marital status ($F = 3.424$; $p = .067$), household income ($F = 1.779$; $p = .185$), dependent children at home ($F = 3.964$; $p = .049$), number of children ($r = -.224$; $p = .015$), and length of time in Canada ($r = .125$; $p = .178$).

Overall QOL. The following independent variables were found to have a significant association with *overall QOL* at an alpha of $\leq .25$, and were entered into the stepwise linear regression analysis: experiences of discrimination ($F = 13.776$; $p < .001$), patient-provider communication ($r = .214$; $p = .021$), trust, caring, and truth-telling ($r = .172$; $p = .064$), interpreter use ($F = 2.508$; $p = .116$), overall trust in provider ($F = 1.921$; $p = .168$), age ($r = -.247$; $p = .007$), education ($F = 1.631$; $p = .171$), marital status ($F = 2.647$; $p = .106$), dependent children at home ($F = 2.853$; $p = .094$), and number of children ($r = -.216$; $p = .020$).

Table 2. *Health-related QOL – One-way ANOVA Analyses*

Variable	N	Physical	Psychological	Social	Environment	Overall QOL
		Health		Relationships		
		M ± SD				
Complementary & alternative medicine						
No use	103	56.47 ± 11.52	61.65 ± 12.05	64.16 ± 17.14	62.11 ± 14.82	61.10 ± 11.33
Use	14	57.65 ± 17.54	57.74 ± 14.79	67.26 ± 24.56	62.28 ± 19.63	61.23 ± 17.65
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Overall trust in provider						
No Trust	27	52.65 ± 11.83*	60.34 ± 12.25	63.89 ± 18.34	56.25 ± 13.79**	58.28 ± 11.18*
Trust	90	57.80 ± 12.26*	61.44 ± 12.50	64.72 ± 18.11	63.89 ± 15.45**	61.96 ± 12.36*
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Interpreter use						
No	68	57.44 ± 12.49	61.21 ± 12.29	66.54 ± 19.45*	65.26 ± 15.75**	62.61 ± 12.77*
Yes	49	55.47 ± 12.07	61.14 ± 12.68	61.73 ± 15.77*	57.78 ± 13.85**	59.03 ± 11.03*
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Experiences of discrimination						
No discrimination	58	58.81 ± 10.83*	64.87 ± 11.99**	67.67 ± 17.25*	69.07 ± 12.16**	65.11 ± 10.45**
Discrimination	59	54.50 ± 13.34*	57.56 ± 11.80**	61.44 ± 18.50*	55.30 ± 15.21**	57.19 ± 12.51**
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15

		Physical Health	Psychological	Social Relationships	Environment	Overall QOL
Variable	N	M ± SD				
Gender						
Male	22	58.77 ± 13.62	63.64 ± 14.27	64.02 ± 15.51	61.93 ± 15.05	62.09 ± 12.25
Female	95	56.11 ± 12.00	60.61 ± 11.94	64.65 ± 18.70	62.17 ± 15.52	60.89 ± 12.19
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Education						
Less than high school	18	60.91 ± 16.18	65.51 ± 12.93*	70.83 ± 16.73	66.84 ± 18.35	66.02 ± 14.34*
High school or equivalent	25	58.57 ± 14.58	64.50 ± 14.69*	68.33 ± 19.69	63.25 ± 15.02	63.66 ± 13.17*
College or diploma	12	55.95 ± 7.66	61.11 ± 7.61*	61.81 ± 18.62	63.28 ± 9.98	60.54 ± 8.91*
University degree	53	54.76 ± 10.87	58.73 ± 11.21*	61.79 ± 17.41	59.49 ± 14.73	58.69 ± 11.04*
Graduate degree	9	54.37 ± 8.33	57.87 ± 14.20*	61.11 ± 18.16	63.54 ± 19.52	59.22 ± 12.87*
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Marital status						
Not in a relationship	18	62.70 ± 8.51**	66.67 ± 11.34**	63.89 ± 18.08	68.23 ± 10.68*	65.37 ± 9.21*
In a relationship	99	55.51 ± 12.59**	60.19 ± 12.37**	64.65 ± 18.18	61.02 ± 15.87*	60.34 ± 12.50*
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Dependent children at home						
No	41	59.41 ± 10.88*	61.48 ± 11.44	67.89 ± 19.15*	65.93 ± 15.44**	63.68 ± 12.18*
Yes	76	55.11 ± 12.82*	61.02 ± 12.96	62.72 ± 17.35*	60.07 ± 15.03**	59.73 ± 12.00*
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15

		Physical Health	Psychological	Social Relationships	Environment	Overall QOL
Variable	N	M ± SD				
Household income						
Less than \$35,000	92	56.43 ± 12.84	60.91 ± 12.63	64.04 ± 17.94	61.14 ± 15.21*	60.63 ± 12.42
More than \$35,000	25	57.28 ± 10.28	62.17 ± 11.72	66.33 ± 18.86	65.75 ± 15.72*	62.88 ± 11.19
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Employment status						
Not employed	96	56.50 ± 12.36	61.24 ± 12.78	63.80 ± 17.47	61.88 ± 14.88	60.86 ± 11.85
Employed	21	57.14 ± 12.32	60.91 ± 10.74	67.86 ± 20.80	63.24 ± 17.78	62.29 ± 13.73
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15
Regular HCP						
No	15	55.95 ± 9.32	60.28 ± 8.46	61.11 ± 20.09	60.21 ± 14.58	59.39 ± 9.01
Yes	102	56.71 ± 12.72	61.32 ± 12.90	65.03 ± 17.82	62.41 ± 15.53	61.37 ± 12.57
Total	117	56.61 ± 12.30	61.18 ± 12.40	64.53 ± 18.08	62.13 ± 15.37	61.11 ± 12.15

* $p > .05$ and $\leq .25$; ** $p \leq .05$

Table 3. *Health-related QOL – Pearson Correlations*

Variables	1	2	3	4	5	6	7	8	9	10
1. Physical Health	1									
2. Psychological	.639**	1								
3. Social Relationships	.579**	.500**	1							
4. Environment	.634**	.627**	.611**	1						
5. Overall QOL	.832**	.801**	.839**	.864**	1					
6. Patient-provider communication	.105	.230**	.111*	.276**	.214**	1				
7. Trust, caring and truth-telling	.114*	.213**	.040	.232**	.172*	.430**	1			
8. Age	-.184**	-.189**	-.278**	-.154*	-.247**	-.009	.084	1		
9. Number of children	-.285**	-.074	-.145*	-.224**	-.216**	.107*	.138*	.017	1	
10. Length of time in Canada	-.054	-.045	.027	.125*	.025	-.057	.075	.177*	.086	1

* $p > .05$ and $\leq .25$; ** $p \leq .05$

Adjusted Multivariate Analyses

Results of the linear regression analyses are presented for each QOL domain and for overall QOL (see Table 4). Variables that predicted the *physical health* domain of QOL among new immigrant participants in this study include: overall trust in the primary health care provider ($\beta = .192$; $p = .030$), number of children ($\beta = -.279$; $p = .002$) and age ($\beta = -.197$; $p = .026$). Experiences of discrimination ($\beta = .318$; $p < .001$) and education ($\beta = -.262$; $p = .003$) predicted the *psychological* domain of QOL among participants. Variables that predicted the *social relationships* domain include: age ($\beta = -.281$; $p = .002$) and experiences of discrimination ($\beta = -.177$; $p = .048$). Experiences of discrimination ($\beta = -.408$; $p < .001$) and interpreter use ($\beta = .200$; $p = .013$) predicted the *environmental* domain of QOL. Variables that were predictive of overall QOL include: experiences of discrimination ($\beta = -.313$; $p < .001$), education ($\beta = -.327$; $p < .001$) and number of children ($\beta = -.261$; $p = .003$).

Table 4. *Health-related QOL – Step-wise Linear Regression Analyses*

QOL Domain	Variable	B	S.E.	β	T	<i>p</i>
Physical	Number of Children	-.360	.112	-.279	-3.220	.002
Health	Age	-2.830	1.252	-.197	-2.259	.026
	Overall Trust in Provider	.892	.405	.192	2.200	.030
Psychological	Experiences of Discrimination	-1.255	.341	.318	-3.680	< .001
	Education	-.411	.136	-.262	-3.033	.003
Social	Age	-5.937	1.869	-.281	-3.177	.002
Relationships	Experiences of Discrimination	-1.020	.510	-.177	-2.002	.048
Environment	Experiences of Discrimination	-2.075	.406	-.424	-5.109	< .001
	Interpreter Use	-.884	.412	-.178	-2.147	.034
Overall QOL	Experiences of Discrimination	-4.856	1.293	-.313	-3.755	< .001
	Education	-2.011	.530	-.327	-3.794	< .001
	Number of Children	-1.328	.443	-.261	-3.001	.003

Research Question #2: Satisfaction with Care

Do patients' perceptions of healthcare provider cultural competence predict satisfaction with care among immigrant populations?

Preliminary Unadjusted Univariate Analyses

One-way ANOVA analyses and Pearson correlations were conducted to explore the relationship between patients' perceptions of healthcare providers' cultural competence and satisfaction with care. The mean score for satisfaction with care was 3.76 out of 5 (SD \pm .847). The following independent variables were found to have a significant association with *satisfaction with care* at an alpha of \leq .25 and were entered into the stepwise linear regression analysis: overall trust in provider ($F = 24.87$; $p < .001$), experiences of discrimination ($F = 19.71$; $p < .001$), patient-provider communication ($r = .437$; $p < .001$), trust, caring and truth-telling ($r = .424$; $p < .001$), education ($F = 2.267$; $p = .066$), marital status ($F = 1.707$; $p = .194$), and having a regular HCP ($F = 2.091$; $p = .151$). See Table 5 and Table 6.

Table 5. *Satisfaction with Care – One-way ANOVA Analyses*

Variable	N	Satisfaction with care		
		M \pm SD	F	p
Complementary and alternative medicine			.047	.828
No use	103	3.77 \pm .877		
Use	14	3.71 \pm .611		
Total	117	3.76 \pm .847		
Overall trust in provider			24.87**	< .001
No Trust	27	3.11 \pm .847		
Trust	90	3.96 \pm .748		
Total	117	3.76 \pm .847		

Variable	N	Satisfaction with care		
		M ± SD	F	p
Interpreter use			.892	.347
No	68	3.82 ± .772		
Yes	49	3.67 ± .944		
Total	117	3.76 ± .847		
Experiences of discrimination			19.71**	< .001
No discrimination	58	4.09 ± .756		
Discrimination	59	3.44 ± .815		
Total	117	3.76 ± .847		
Education			2.267*	.066
Less than high school	18	4.11 ± .900		
High school or equivalent	25	3.72 ± .678		
Community college/diploma	12	4.17 ± .577		
Undergraduate degree	53	3.57 ± .930		
Graduate degree	9	3.78 ± .667		
Total	117	3.76 ± .847		
Gender			.581	.447
Male	22	3.64 ± .953		
Female	95	3.79 ± .824		
Total	117	3.76 ± .847		
Marital status			1.707*	.194
Not in a relationship	18	4.00 ± .594		
In a relationship	99	3.72 ± .881		
Total	117	3.76 ± .847		
Dependent children at home			.073	.787
No	41	3.73 ± .742		
Yes	76	3.78 ± .903		
Total	117	3.76 ± .847		

Variable	N	Satisfaction with care		
		M ± SD	F	p
Household income			.073	.788
Less than \$35,000	92	3.77 ± .813		
More than \$35,000	25	3.72 ± .980		
Total	117	3.76 ± .847		
Employment status			.001	.994
Not employed	96	3.76 ± .831		
Employed	21	3.76 ± .855		
Total	117	3.76 ± .847		
Regular HCP			2.091*	.151
No	15	3.47 ± .834		
Yes	102	3.80 ± .845		
Total	117	3.76 ± .847		

* $p > .05$ and $\leq .25$; ** $p \leq .05$

Table 6. *Satisfaction with Care – Pearson Correlations*

Variables	1	2	3	4	5	6
1. Satisfaction with care	1					
2. Patient-provider communication	.437**	1				
3. Trust, caring and truth-telling	.424**	.430**	1			
4. Age	-.048	-.009	.084	1		
5. Number of children	-.010	.107*	.138*	.017	1	
6. Length of time in Canada	.045	-.057	.075	.177*	.086	1

* $p > .05$ and $\leq .25$; ** $p \leq .05$

Adjusted Multivariate Analyses

Results of the linear regression (Table 7) indicated that four variables predicted *satisfaction with care*: patient-provider communication ($\beta = .233$; $p = .013$), overall trust in provider ($\beta = .342$; $p < .001$), experiences of discrimination ($\beta = -.223$; $p = .016$), and education ($\beta = -.171$; $p = .028$).

Table 7. *Satisfaction with Care – Step-wise Linear Regression Analyses*

Outcome	Variable	B	S.E.	β	t	p
Satisfaction with Care	Patient-Provider Communication	4.031	1.593	.233	2.53	.013
	Overall Trust in Provider	.684	.155	.342	4.426	< .001
	Experiences of Discrimination	-.376	.154	-.223	-2.448	.016
	Education	-.115	.051	-.171	-2.233	.028

CHAPTER 5

DISCUSSION

This chapter presents a discussion of the study results. The findings of each research question will be examined within the context of existing literature and the study's conceptual framework. Implications for nursing practice and education, policy, and research are provided, followed by limitations of the study, and a concluding summary of the discussion.

Research Question #1

The primary research question was: *Do patients' perceptions of healthcare provider cultural competence predict health-related quality of life among immigrant populations?* The findings of this study suggest that three domains of patient-perceived cultural competence do predict health-related QOL among new immigrants: (1) experiences of discrimination; (2) interpreter use; and (3) overall trust in their primary care provider. Age, level of education and number of children also predicted the QOL of new immigrants in this study.

Experiences of Discrimination

According to Agudelo-Suárez et al. (2009), discrimination is defined as a process through which members of a socially defined group are treated in an unfair manner, on the basis of belonging to that group. It is a complex phenomenon that can be experienced by immigrants, visible minorities, and members of the host country, since it can be based on various factors such as socioeconomic status, gender, language, race, ethnic background, and nationality (Agudelo-Suárez et al., 2009; Noh, Beiser, Kaspar, Hou, & Rummens, 1999). Discrimination can take the form of direct attitudes and behaviours, or

more subtle and indirect ones (Noh et al., 1999). It can also manifest at individual, cultural, or institutional levels (Noh et al., 1999). While it seems as though the outright expression of discrimination has declined in recent decades, particular groups in society continue to experience the more subtle and chronic forms of discrimination (Pascoe & Smart Richman, 2009).

Findings of the present study suggest that experiences of discrimination due to race/ethnicity, insurance, or language significantly predicted *psychological, social relationships, and environmental QOL*, as well as *overall QOL*. Experiences of discrimination was positively associated with psychological QOL, and negatively associated with social relationships, environmental QOL, and overall QOL. Interestingly, experiences of discrimination had a significant impact on the psychosocial determinants of health, but not actual physical health. This may be because it takes time for the effects of discrimination to manifest into actual physical health problems.

In this study, only 12.8% of new immigrant participants (n = 15) reported experiencing unfair treatment at their health care provider's office because of their race or ethnicity, and because of the type of health insurance they have, or not having health insurance. In terms of discrimination due to language, 44.5% of participants reported unfair treatment because they did not speak English well (n = 52). Although the overall prevalence of perceived discrimination among study participants appears to be relatively low, the experience of such discrimination is nonetheless strongly associated with participants' evaluations of their psychological, social, and environmental QOL. This finding is consistent with literature suggesting that experiences of discrimination or unfair treatment are related to poor self-reported health status and quality of life among

visible minorities and immigrant populations (De Maio & Kemp, 2010; Edge & Newbold, 2013; Gee & Ponce, 2010; Williams, Neighbors, & Jackson, 2003).

A growing body of literature now examines the central role racism plays in the production of health disparities among racial and ethnic minorities, raising attention to how everyday experiences of discrimination or unfair treatment may impact health (Hyman, 2009; Pascoe & Smart Richman, 2009; Viruell-Fuentes, Miranda, & Abdulrahim, 2012; Williams & Mohammed, 2009). Empirical evidence from population-based studies indicate that discrimination is associated with multiple indicators of poorer mental and physical health (Pascoe & Smart Richman, 2009; Williams et al., 2003). The effects of perceived discrimination on mental health are widely supported in the literature, with multiple adverse outcomes that have been documented, such as anxiety, depression, anger, and psychological distress (Edge & Newbold, 2013; Pascoe & Smart Richman, 2009). Interestingly, research shows that the relationship between discrimination and mental health is stronger among non-recent immigrants in comparison to recent immigrants, which suggests that the mental strain associated with discrimination has a long-lasting effect on the mental health of immigrants (Hyman, 2009).

Although the link between discrimination and physical health is not as clear, perceived discrimination has been associated with specific physical health problems such as hypertension or alterations in blood pressure, increased risk for cardiovascular diseases, and potential risk factors for disease, including stress, obesity, substance abuse, and cigarette smoking (Agudelo-Suárez et al., 2009; Edge & Newbold, 2013; Pascoe & Smart Richman, 2009; Williams et al., 2003). Experiences of discrimination were also

found to decrease adherence with medical recommendations and impede access to healthcare services (Edge & Newbold, 2013; Williams et al., 2003).

Language also represents a significant barrier to care, with findings in the literature suggesting that low English or French proficiency was associated with poorer health outcomes (McKeary & Newbold, 2010). According to Edge and Newbold (2013), discrimination based on language and accent is most evident among immigrants and newcomers. Experiences of racial discrimination are often underreported when explicitly asked within surveys, however, for these questions tend to generate confusion for respondents struggling to identify the root cause of their discriminatory treatment (Edge & Newbold, 2013).

Existing research also demonstrates that newcomer groups perceive and cope with acts of discrimination differently (Edge & Newbold, 2013; Noh et al., 1999). Those who employed passive responses to discrimination had higher blood pressure levels and experienced worse psychological symptoms than those who coped through more active, direct approaches, such as talking to others about the situation, or taking action to address the issue (Edge & Newbold, 2013; Noh et al., 1999). In most cases, coping strategies were indicative of available personal and social resources such as language skills, finances, and awareness of rights and supports (Edge & Newbold, 2013). Living in ethnically diverse neighbourhoods also served as a protective factor for some ethno-cultural groups (Edge & Newbold, 2013). Overall, immigrant and minority groups of diverse backgrounds were more willing to confront discrimination when supportive resources were in place, and individuals were more comfortable and adapted to their new environment (Edge & Newbold, 2013; Pascoe & Smart Richman, 2009).

Interpreter Use

It is well established that language barriers impede access to health care, compromise quality of care, and contribute to health disparities among patients with limited English proficiency (LEP) (Bauer & Alegría, 2010; Karliner, Jacobs, Chen, & Mutha, 2007; Ku & Flores, 2005; Mui, Kang, Kang, & Domanski, 2007). Patients with LEP are unable to communicate at a level that permits them to interact effectively with healthcare providers (Karliner et al., 2007). In the present study, 62.4% of respondents reported speaking English “well” or “very well” (n = 73). 35% of respondents reported speaking English “not well” (n = 41), and 2.6% of respondents reported not speaking English at all (n = 3).

In the literature, immigrants with LEP are found to have limited access to a regular source of care and make less visits to their primary care provider (Brach & Fraserirector, 2000; Karliner et al., 2007). Even when they do have access to care, LEP patients tend to have an inadequate understanding of their diagnoses and medical situation, poor adherence to treatment, and less overall satisfaction with care (Derose, Escarce, & Lurie, 2007; Karliner et al., 2007; Ngo-Metzger et al., 2007). Although some LEP patients are lucky enough to be seen in settings where healthcare providers and office staff speak their primary language, this language concordance is often lost once patients present for laboratory or diagnostic testing, emergency care, or are admitted to the hospital (Karliner et al., 2007). Therefore, many instances will require the use of an interpreter to bridge the communication gap present in language-discordant encounters (Karliner et al., 2007). Interpreters can range from highly trained professional

interpreters to ad hoc interpreters such as bilingual family members or friends (Karlner et al., 2007).

In the present study, 41.9% of respondents reported needing an interpreter at their provider's office in the last 12 months (n = 49). When using an interpreter provided by their provider's office, 21.4% of respondents reported using a nurse, clerk, or receptionist most often (n = 25). On average, respondents rated these interpreters a 6.5 out of 10 (SD = 3.1). 60.7% of respondents used a friend or family member as an interpreter when communication with their provider (n = 71), however, using friends or family members was not preferred for 42.7% of respondents (n = 50). In addition, interpreter use was found to be a significant predictor of *environmental* QOL. There was a negative relationship between needing and using an interpreter, and participant ratings of their environmental QOL. In other words, those who required an interpreter at their provider's office reported lower levels of environmental QOL.

In this study, the only link found between interpreter use and environmental QOL was in relation to the accessibility and quality of health and social care, an aspect of environmental QOL according to the WHOQOL Group (1998). A growing body of literature has found that the use of interpreters is associated with an overall improvement in quality of care for LEP patients (Karlner et al., 2007). More appropriate screening and treatment, reductions in communication, diagnostic, and medical errors, avoidance of drug interactions, and increased medication adherence are all improvements in quality that come from the use of interpreters (Brach & Fraserirector, 2000; Karlner et al., 2007). Findings also indicate that the use of trained interpreters and bilingual providers

has a greater positive impact on quality of care as opposed to the use of untrained interpreters, such as family or friends (Flores, 2005; Karliner et al., 2007).

In terms of health care accessibility, interpreter use was found to enhance LEP patients' access to primary care and preventive services (Jacobs, Shepard, Suaya, & Stone, 2004). Studies document that LEP patients who use professional interpreters had increased healthcare-seeking behaviour, more visits to their primary care provider, and were more likely to receive preventive health care services (Brach & Fraserirector, 2000; Flores, 2005; Jacobs, Shepard, Suaya, & Stone, 2004). According to Brach and Fraserirector (2000), the presence of interpreter services also expanded patients' choices and access to high-quality providers. Unavailability of interpreters or failure to use interpreters has been noted as one of the most significant barriers to accessing health care services among immigrants and newcomers (Kirmayer et al., 2011).

Overall Trust in Provider

Trust in the context of healthcare has received increasing attention in the past few decades (Müller, Zill, Dirmaier, Härter, & Scholl, 2014). Since the patient-provider relationship is characterized by a knowledge and power imbalance, patients depend on their providers' specialized knowledge and experience to treat and manage their health problems (Müller et al., 2014). Studies have found that patients' trust in provider is associated with patient satisfaction, continuity of care, and adherence to medical advice and pharmacological regimens (Müller et al., 2014; Suurmond, Uiters, de Bruijne, Stronks, & Essink-Bot, 2011; Thom, Hall, & Pawlson, 2004; Traylor, Schmittiel, Uratsu, Mangione, & Subramanian, 2010). Trust in provider facilitates access to healthcare and disclosure of relevant health information, and allows for more accurate

and timely diagnoses to be made (Müller et al., 2014). In addition, trust in provider has been linked to better self-reported health, and improved ability to manage chronic diseases (Müller et al., 2014; Suurmond et al., 2011).

In this study, overall trust in primary health care provider was found to be predictive of the *physical health* domain of QOL. A positive relationship existed between overall trust in provider and physical health, indicating that the more trust participants had in their providers, the better their physical health-related QOL. On average, study respondents rated the trust in their provider a 7.5 out of 10 (SD = 2.4). When participants were asked if they could trust this provider with their medical care, 64.1% of respondents said “yes, definitely” (n = 75), 26.5% said “yes, somewhat” (n = 31), and 9.4% said “no” (n = 11). When asked if they felt they could tell their provider anything, 45.3% of respondents said “yes, definitely” (n = 53), 23.1% said “yes, somewhat” (n = 27), and 31.6% said “no” (n = 37). This indicates that the majority of respondents had moderately high levels of trust in their primary healthcare providers.

Despite mixed literature findings, past research often suggests that immigrant and ethnic minority patients are vulnerable to low levels of trust in their providers (Hillen, de Haes, Verdam, & Smets, 2017). The high levels of trust observed among respondents in this study is inconsistent with these previous suggestions (Hillen et al., 2017). This discrepancy can be explained by the possibility that some respondents were connected with health care providers who shared similar cultural backgrounds. This can be expected in a diverse and multicultural city like Windsor, Ontario. According to Traylor et al. (2010), racial, ethnic, and language concordance fosters trust, communication and better patient-provider interactions. It is also possible that many immigrant patients feel a

strong “need” to trust their provider, especially when cultural and language barriers are present (Hillen et al., 2017). Ultimately, having a provider who understands the patient’s culture can play a major role in promoting trust, confidence, and continued use of the service (O'Mahony & Donnelly, 2007; Saha, Komaromy, Koepsell, & Bindman, 1999).

Age

In this study, age was found to be a predictor of the *physical health* and *social relationships* domains of QOL. A negative relationship existed between age and both physical health and the social indicators of QOL. The older participants were, the lower they rated their physical health, and the less satisfied they were with aspects of their personal relationships, social support, and sexual activity. This contradicts the findings of Fugl-Meyer, Melin, and Fugl-Meyer (2002), who explored levels of self-reported satisfaction with life in relation to gender, age, partner, and immigrant status among a Swedish sample of adults. Their analyses show that neither satisfaction with life as a whole, or satisfaction with the social domain of life, including aspects such as partner relationships, sexual life, and contacts with friends and acquaintances, were significantly associated with age (Fugl-Meyer et al., 2002).

Interestingly, the association between age and social indicators of QOL was discussed in the literature in relation to age at time of immigration (Leu et al., 2008). Leu et al. (2008) suggest that the age when people immigrate shapes the ways in which they learn and use a new language, the opportunities they have to meet and socialize with different people, and their exposure to healthy or stressful environments. The social institutions that affect people’s lives, such as families, schools, and workplaces, also vary by age at immigration, and may lead to different life course trajectories (Leu et al., 2008).

Education

According to the literature, education is an important means of attaining economic and social rewards (Leu et al., 2008). Level of education demonstrates a positive and consistent association with health (Leu et al., 2008). This makes sense, as gaining higher levels of education leads to greater cognitive abilities, more opportunities to enhance income, better quality jobs in safe work environments, and a wider range of social networks that provide emotional and instrumental support (Leu et al., 2008). All of these factors are linked to better mental health (Leu et al., 2008). Although Mui, Kang, Kang, and Domanski (2007) suggest that ethnic minority status is often associated with minimal education, low income, substandard housing, and lack of opportunity, the present study reveals that this is not always the case.

In this study, education was found to be a significant predictor of the *psychological* domain of QOL and *overall* QOL. Education had a negative relationship with psychological health and overall QOL. This means that the more education respondents had, the lower their self-reported health-related QOL. As highlighted in Chapter 4, over half (52.9%) of the participants in this study reported having an undergraduate or graduate university degree, and three quarters (75.2%) of participants reported being unemployed. Although many participants had high levels of education, very few were currently employed. All were enrolled in English language classes, and only 15.4% of respondents kept some kind of job on the side (n=18).

This finding supports previous research suggesting that many well-educated newcomers experienced almost no returns to their university education, and often found themselves unemployed or with low earnings in spite of their education (Picot, 2008).

Some explanations for this may include difficulty obtaining Canadian accreditation to find work in their field, limited language skills, and possible reluctance of employers to hire people with little or no Canadian education or work experience (Dharssi, 2016; Picot, 2008). Interestingly, while many new immigrants expressed dissatisfaction with their economic experiences in Canada, most provided positive evaluations of the ‘quality of life’ in Canada (Picot, 2008). Many immigrants planned to settle permanently in Canada because of the optimistic future for their children, and the educational opportunities that came with this (Picot, 2008).

Number of Children

Study findings suggest that number of children is predictive of the *physical health* domain of QOL and *overall* QOL. Number of children was found to negatively impact both physical health and overall QOL. This means that the more children participants had, the worse they rated their physical health and overall QOL.

Although no studies were found exploring the link between number of children and health-related QOL among immigrants specifically, there were a few studies that shed light on the association between number of children, well-being, and happiness at a global level (MaRgolis & MyRskylä, 2011). Much of the world is influenced by the belief that children increase the happiness and wellbeing of parents, especially that of mothers (MaRgolis & MyRskylä, 2011). These beliefs have supported the norms about having children, with parenthood changing lives in positive and negative ways (MaRgolis & MyRskylä, 2011).

For parents, having a child creates new roles, brings purpose and meaning into parents’ lives, as well as lifelong social connections (Lyubomirsky, 2013; MaRgolis &

MyRskylä, 2011; Swanson, 2016). According to research, having children also tends to lower marital satisfaction, increase housework, and strain the psychological well-being of parents (MaRgolis & MyRskylä, 2011; Pappas, 2011). According to Pappas (2011), having more children makes young couples unhappy. As children grow older, however, feelings of unhappiness tend to fade as larger families bring joy to parents in midlife and old age (Pappas, 2011). This difference may be due to the financial and emotional costs of raising children, which are greater when children are young (MaRgolis & MyRskylä, 2011). In contrast, when parents are older, their grown children may be the ones providing them with needed support, attention and care (MaRgolis & MyRskylä, 2011).

Research Question #2

Satisfaction with Care

The secondary research question was: *Do patients' perceptions of healthcare provider cultural competence predict satisfaction with care among immigrant populations?* When participants were asked about how satisfied they were with the health care they received in the last 12 months, 17.1% reported being very satisfied (n = 20), 49.6% were satisfied (n = 58), 27.4% were neither satisfied nor dissatisfied (n = 32), 4.3% were dissatisfied (n = 5), and 1.7% were very dissatisfied (n = 2). Overall, four variables were found to predict satisfaction with care: (1) patient-provider communication; (2) overall trust in provider; (3) experiences of discrimination; and (4) education. Patient-provider communication and overall trust in provider had a positive relationship with satisfaction, whereas experiences of discrimination and education had a negative relationship with satisfaction. This means that good patient-provider communication and high levels of trust in provider led to greater satisfaction with care.

On the contrary, those who experienced discrimination or completed higher levels of education were less satisfied with care.

According to McKinley, Stevenson, Adams, and Manku-Scott (2002), the relationship between satisfaction and quality of care is complex; it is affected by patient, provider, and service factors. Patient expectations of care also play an important role in satisfaction, where patients with high expectations may be dissatisfied with optimal care, and those with low expectations may be satisfied with less-than-optimal care (McKinley et al., 2002). It may be that those with higher levels of education in the present study also had higher expectations of care, and therefore reported lower levels of satisfaction with care. Findings from McKinley et al. (2002) further suggest that satisfaction differs among people based on factors such as social class, age, gender, and ethnicity or culture. Differences in satisfaction were also observed between various health care services and types of care (McKinley et al., 2002).

In general, however, immigrants and those with LEP are less satisfied with their care than those who are native-born or English-speaking (Derose, Escarce, & Lurie, 2007). Findings from studies in the United States reveal that Blacks, Hispanics, and Asians tend to rate their healthcare experiences less positively than those who are White (Liu, So, & Quan, 2007). Among Asian Americans specifically, low levels of satisfaction and trust have been well documented (Liu et al., 2007; Ngo-Metzger, Legedza, & Phillips, 2004). In a study which explored Asians' reports of their health care experiences and provider interactions, many stated that poor listening skills, insufficient time spent during the encounter, and a lack of patient involvement in decision-making led to dissatisfaction with care (Ngo-Metzger et al., 2004). In general,

other factors contributing to differences in patient satisfaction included: education level, socioeconomic status, physical and emotional health, health insurance coverage and healthcare costs, conflicting cultural views on healthcare, and communication or language barriers (Liu et al., 2007). Additionally, perceptions of being discriminated against was found to cause dissatisfaction with health care and decreased future use of services (Derose et al., 2007). According to Derose et al. (2007), many immigrants are reluctant to seek care due to concerns about poor treatment and long wait times.

Degree of Fit with Conceptual Framework

Cox's (1982) Interaction Model of Client Health Behaviour (IMCHB) was highly useful in guiding the present study. The process model allowed for the identification and explanation of relationships between client singularity, the client-provider relationship, and subsequent client health care behaviour and health outcomes in the population studied (Cox, 1986; Cox, 1982). Although only select elements from Cox's (1982) model were used, this did not affect the application of its elements as a guide for studying the impact of cultural competent care on health-related outcomes among a group of immigrants. The elements explored include client singularity (demographic characteristic and previous health care experiences) and client-professional interaction (affective support and health information) as they relate to culturally competent care. The elements of health outcome examined include clinical health status indicators (health-related QOL) and satisfaction with care. With the understanding that each element mutually influences other elements and their associated variables, use of this model was an ideal choice for studying this phenomenon. It is recommended that future studies on this topic utilize the IMCHB as it will allow for patterns and relationships to be explored in a similar manner.

Implications and Recommendations for Nursing

Practice and Education

Changing attitudes, behaviours, and practices within the health professions to better address cultural competence is necessary in order to better serve an increasingly diverse patient population (Shaya & Gbarayor, 2006). This change is most effective when started during health professional education with the implementation of a curriculum that provides students with the knowledge, attitudes, and skills to better understand how people of diverse cultures and belief systems perceive health and illness, and respond to various symptoms, diseases, and treatments (Ihara, 2004; Shaya & Gbarayor, 2006). At this time, cultural competency training can promote awareness of immigrants' migratory and settlement experiences, and the power dynamics involved in cross-cultural patient-provider relationships (Edge & Newbold, 2013).

Training for health professionals can also focus on recognizing personal biases against people of different cultures, respecting and tolerating cultural differences, fostering a safe and welcoming environment for all patients, and accepting the responsibility to combat bias, prejudice, and discrimination that occur in health care settings (Ihara, 2004; Shaya & Gbarayor, 2006). It is also very important that efforts are made to standardize cultural competency training for health professionals (Ihara, 2004). Training courses often vary in content and teaching method, and can range from a single three-hour lecture to semester-long courses (Ihara, 2004). Training health professionals in a consistent manner is so important because cultural competence is an ongoing process rather than an endpoint; cultural competence is developed in stages by building upon previous knowledge and experiences (Ihara, 2004).

Ultimately, the intent of culturally competent care is to assist health care professionals in reflecting upon their own and others' cultural beliefs and behaviours in order to enable practical skills and communication strategies that facilitate the delivery of high quality, non-discriminatory care (Edge & Newbold, 2013). It is important to keep in mind that even when health care is considered to be adequate by objective measures, patients may rate care poorly if they feel discriminated against or mistreated in the process (Sorkin, Ngo-Metzger, & De Alba, 2010). Therefore, efforts to improve quality of care must address perceptions of inequality, incidences of discrimination, and disparities in health access and outcomes (Edge & Newbold, 2013; Sorkin et al., 2010).

Since health care providers are gatekeepers to the health care system, efforts to improve providers' communication and interpersonal skills, enhance cross-cultural patient-provider interactions, and increase patients' health literacy should also be undertaken (Saha, Arbelaez, & Cooper, 2003). Other strategies to improve care for immigrant patients include hiring professionals that share patients' languages and ethnic backgrounds, ensuring that interpretation services are accessible, and that culturally and linguistically appropriate materials are available across health care settings (Edge & Newbold, 2013).

In addition, promoting more supportive practice climates can provide a greater opportunity for trusting relationships to be built (Becker & Roblin, 2008). Establishing trust with immigrant patients is so important because it creates more open and genuine patient-provider interactions (Hillen et al., 2017). When patients trust their providers, they have a greater opportunity to become knowledgeable and empowered partners in

their care, and they are more motivated to succeed in improving and maintaining their health (Becker & Roblin, 2008).

Policy Development

A better understanding of immigrants' perspectives has the potential to enhance quality of life, reduce health disparities, and inform the advancement of relevant programs and policies in the health sector (Stewart et al., 2006). Findings from this study suggest that experiences of discrimination are most predictive of health-related quality of life among new immigrant participants. Experiences of discrimination and unfair treatment may also be significant drivers of health inequities in this population (De Maio & Kemp, 2010). According to Hyman (2009), racism shapes the environment in which new Canadians live, and influences health behaviours, stress, material deprivation, and access to quality health care. Recognizing racism as a determinant of immigrant health is the first step towards reducing health disparities (Hyman, 2009).

Some policy recommendations include: increasing public awareness of racism and its impact on health, access to care, and quality of care; advocating for reforms in government policies that adversely affect the health of new Canadians; incorporating cultural competence and anti-racism perspectives into governance, organizational policies, and staff recruitment; supporting training for healthcare providers in the provision of inclusive and non-discriminatory care; and enabling health care recipients to participate in knowledge transfer and exchange activities aimed towards promoting institutional change and improving health care practices (Hyman, 2009; Ihara, 2004).

Institutional racism can be reduced by increasing representation of racialized groups throughout organizations, and ensuring that decision making does not exclude or

marginalize specific groups (Hyman, 2009). It is also important to increase recruitment and retention of staff who reflect the diversity of Canadian society and understand the ethnic and cultural backgrounds of the population they serve (Hyman, 2009; Ngo-Metzger et al., 2007). For LEP patients, ensuring the availability of professional linguistic and cultural interpretation in all health care facilities can also overcome a significant barrier to quality care (Hyman, 2009).

Ways of evaluating and monitoring access to and quality of care received by health care consumers is also vitally important (Hyman, 2009). Similar to the CAHPS-CC tool, indicators of culturally competent care and experiences of discrimination can be developed and improved for use in health surveys across various health care settings. Supporting research related to racism, promoting open and honest dialogue about its effects on communities, and establishing local, provincial, and national systems to monitor and evaluate policies and procedures can also aid in the effort to reduce racial and ethnic health disparities and inequities (Hyman, 2009).

Future Research

Although this study offers new insights on existing relationships between cultural competence, discrimination, and health-related quality of life, current knowledge remains incomplete, sometimes contradictory, and in need of further research, validation, and theoretical development (Edge & Newbold, 2013). Methods such as large-scale quantitative surveys and longitudinal analyses, and in-depth qualitative or mixed-methods approaches can be undertaken to address this need (Edge & Newbold, 2013). This would allow for a better understanding of how aspects of cultural competence such as provider

trust, communication, and discrimination are associated with health outcomes and related patterns of vulnerability among newcomer populations.

Future research on the role of perceived discrimination in health should also employ measures that capture subtle experiences and interactions. Currently, there is no consensus on an optimal measure of perceived discrimination (Williams et al., 2009). According to Noh et al. (1999), poor conceptualization, operationalization, and assessment of the concept makes it difficult to develop a knowledge base regarding the relationship between discrimination and health. Although the present study used three items to measure experiences of discrimination, many research to date utilizes just a single-item measure of discrimination (Noh et al., 1999). Not only does this underestimate the true rate of racial or ethnic discrimination, but this may also underestimate its effects on health outcomes, utilization of health services, and satisfaction with care (Noh et al., 1999; Williams et al., 2009).

The same holds true regarding the measurement of cultural competence. With very few instruments offering measures of culturally competent care from the patient's perspective, the need for further development and validation of scales, such as the CAHPS-CC, is imperative. In order to do this, research is needed to examine the factors which influence patient-provider interactions among diverse racial and ethnic groups, and the roles that nurses, community health workers, interpreters, case managers, and patient navigators play in influencing this relationship (Ngo-Metzger et al., 2006). More research is also needed on the mechanisms through which low health literacy and LEP may affect patient-provider communication, interactions, and patient outcomes (Ngo-Metzger et al., 2006).

Furthermore, research is needed to explore and better understand the root causes of distrust in providers, for the studies conducted to date often yielded contradictory results (Ngo-Metzger et al., 2006). It would also be interesting to explore whether differences in levels of provider trust among racial and ethnic minorities were the result of past experiences with the health care system, or varying expectations of care (Ngo-Metzger et al., 2006). Lastly, it would be beneficial to investigate why some immigrant and minority patients prefer to be racially concordant with their providers, and whether racial concordance has an effect on access to care, quality of care, and health outcomes (Ngo-Metzger et al., 2006).

Limitations

This study is subject to several limitations. Firstly, the cross-sectional study design used did not allow for causal inferences to be made between perceptions of culturally competent care and health-related QOL. In addition, this design, along with the inclusion criteria of residing in Canada for five years or less, did not allow for longitudinal exploration of patient experiences and health-related QOL over the years. This also made it difficult to examine the widely accepted phenomenon of the “healthy immigrant effect” among the population studied. Findings may have differed if study variables were examined over a longer period of time.

In terms of the study sample, participation was limited to those who were enrolled in English classes at only two settings, the MCC and the NCCE Inc. Additionally, most participants were enrolled in the upper level classes. Staff at these sites provided translators for those who needed assistance, but the limitation remains that the study survey was not provided in participants’ primary languages. Although many participants

completed the survey on their own, it is possible that some survey items or response options were misunderstood and given incorrect answers. In self-report research like this, it is also possible for the presence of social desirability response bias. Social desirability bias is the tendency of some respondents to answer in a way deemed to be more socially desirable or acceptable than their true response (Grimm, 2010).

Although the present study captured the perceptions of a very ethnically diverse population of new Canadian immigrants in Windsor Ontario, the cohort of immigrants may vary across different communities or cities. Therefore, generalizability of the findings to a wider population or to different contexts may be limited. Windsor's multicultural population is highly reflected in its health care professionals (family physicians and nurses), which may explain in part, the relatively high levels of provider trust, and low levels of self-reported experiences of discrimination. As many immigrants choose providers who speak their same language or who share a similar background, this may support research findings suggesting that racial, ethnic and language concordance improved communication, promoted trust, and helped establish therapeutic relationships between patients and their providers (O'Mahony & Donnelly, 2007; Saha et al., 1999; Traylor et al., 2010).

One final limitation includes challenges with the use of the CAHPS-CC tool. The tool has largely been tested in U.S. health care organizations for the purpose of assessing care satisfaction within these organizations (AHRQ, 2012). Currently, it lacks in-depth instructions for preparing and analyzing data, and is not available in additional languages. It could also benefit from questions that assess language and racial concordance among respondents and their providers. Furthermore, the CAHPS-CC tool was limited in its

ability to provide an overall cultural competence score that would encompass all five domains: (1) patient-provider communication; (2) complementary and alternative medicine; (3) experiences of discrimination; (4) experiences leading to trust or distrust; and (5) linguistic competency and access to language services (AHRQ, 2012). With very few options available for instruments that measure cultural competence from the patient perspective, the CAHPS-CC was deemed the most valid among those assessed for answering the research questions posed in this study. Further research and testing is needed to develop more sound scales that measure patient's perspectives on culturally competent care.

Conclusion

This is the first known Canadian study exploring the impact of patient perceptions of provider cultural competence on health-related quality of life and health care satisfaction among immigrants. Three variables related to cultural competence were found to be predictive of health-related QOL in the population studied: experiences of discrimination, interpreter use, and overall trust in provider. Three demographic variables were also predictive of health-related QOL among participants: age, education, and number of children. The following variables were found to predict satisfaction with care: patient-provider communication, overall trust in provider, experiences of discrimination, and education. The discussion provided explanations for the significant results and demonstrated congruence with findings from the literature. The study also offers implications to inform education, practice, and policy related to the provision of culturally competent care. A better understanding of immigrants' perspectives has the potential to enhance quality of life, reduce health disparities, and promote healthy and

successful integration of immigrants and their families into Canadian society (Viruell-Fuentes et al., 2012).

REFERENCES

- Agency for Healthcare Research and Quality (AHRQ). (2012). About the CAHPS Cultural Competence Item Set. Document No. 2312. Retrieved from <https://www.cahpsdatabase.ahrq.gov/files/CGGuidance/About%20the%20Cultural%20Competence%20Item%20Set.pdf>
- Agency for Healthcare Research and Quality (AHRQ). (2016). *CAHPS Health Literacy Item Sets*. Retrieved from <https://www.ahrq.gov/cahps/surveys-guidance/item-sets/literacy/index.html>
- Agudelo-Suárez, A., Gil-Gonzalez, D., Ronda-Pérez, E., Porthe, V., Paramio-Perez, G., García, A. M., & Garí, A. (2009). Discrimination, work and health in immigrant populations in Spain. *Social Science & Medicine*, *68*(10), 1866-1874. doi:10.1016/j.socscimed.2009.02.046
- Ahmed, R., & Bates, B. R. (2007). Gender differences in patients' perceptions of physicians' cultural competence in health care interactions. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/10281/1/Amad_Bates_patients%20perceptions.pdf
- Ahmed, R., & Bates, B. R. (2010). Assessing the relationship between patients' ethnocentric views and patients' perceptions of physicians' cultural competence in health care interactions. *Intercultural Communication Studies*, *9*(2), 111-127. Retrieved from <http://web.uri.edu/iaics/files/09RukhsanaAhmedBenjaminBates.pdf>

- Ahmed, R., & Bates, B. R. (2012). Development of scales to assess patients' perception of physicians' cultural competence in health care interactions. *Journal of Transcultural Nursing, 23*(3), 287-296. doi: 10.1177/1043659612441025
- Ahmed, R., Bates, B. R., & Romina, S. M. (2016). Assessing the influence of patients' perceptions of physicians' cultural competence on patient satisfaction in an Appalachian Ohio context. *Howard Journal of Communications, 27*(4), 403-421. doi: 10.1080/10646175.2016.1211569
- Alizadeh, S., & Chavan, M. (2016). Cultural competence dimensions and outcomes: A systematic review of the literature. *Health & Social Care in the Community, 24*(6), e117–e130. doi: 10.1111/hsc.12293
- Anderson, L. M., Scrimshaw, S. C., Fullilove, M. T., Fielding, J. E., Normand, J., & Task Force on Community Preventive Services. (2003). Culturally competent healthcare systems: A systematic review. *American Journal of Preventive Medicine, 24*(3), 68-79. doi: 10.1016/S0749-3797(02)00657-8
- Bauer, A. M., & Alegría, M. (2010). Impact of patient language proficiency and interpreter service use on the quality of psychiatric care: A systematic review. *Psychiatric Services, 61*(8), 765-773. doi: 10.1176/ps.2010.61.8.765
- Becker, E. R., & Roblin, D. W. (2008). Translating primary care practice climate into patient activation: The role of patient trust in physician. *Medical Care, 46*(8), 795-805. Retrieved from http://www.jstor.org/stable/pdf/40221740.pdf?casa_token=Ts7N0BpTsbAAAAA:A:75ZMIiF2x5fC2Q7XvUgU34ac4FGJ-

Dj6DhNWmpnACKVyhWp0h0spCbuR6CyTktSHmzMg7g01tk2FQUp3BDGnu
XZGh826UBrczSEf3t1jra9RzFLE_hlw

- Betancourt, J. R., Green, A. R., & Carrillo, J. E. (2002). *Cultural competence in health care: Emerging frameworks and practical approaches* (Vol. 576). New York: Commonwealth Fund, Quality of Care for Underserved Populations. Retrieved from http://www.commonwealthfund.org/usr_doc/betancourt_culturalcompetence_576.pdf
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, 118(4), 293-302. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497553/pdf/12815076.pdf>
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Park, E. R. (2005). Cultural competence and health care disparities: Key perspectives and trends. *Health Affairs*, 24(2), 499-505. doi: 10.1377/hlthaff.24.2.499
- Bethell, C., Carter, K., Latzke, B., & Gowen, K. (2003). Measuring and interpreting health care quality across culturally-diverse populations: A focus on consumer-reported indicators of health care quality. *Portland: Foundation for Accountability*. Retrieved from [http://www.partidagroup.com/resources/pdf/Across_Culturally_Diverse_Populations_\(March_2003\).pdf](http://www.partidagroup.com/resources/pdf/Across_Culturally_Diverse_Populations_(March_2003).pdf)

- Blanchet, G. A., & Pepin, J. (2012). Cultural safety: A concept analysis. *Recherche en Soins Infirmiers, 111*(4), 22-35. doi: 10.3917 / rsi.111.0022.
- Brach, C., & Fraserirector, I. (2000). Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. *Medical Care Research and Review, 57*(4), 181-217. doi: 10.1177/1077558700574009
- Burchum, J. L. R. (2002). Cultural competence: An evolutionary perspective. *Nursing Forum, 37*(4), 5-15. doi:10.1111/j.1744-6198.2002.tb01287.x
- Burns, N. & Grove, S.K. (2009). *The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence*. St. Louis: Saunders Elsevier.
- Cai, D. Y. (2016). A concept analysis of cultural competence. *International Journal of Nursing Sciences, 3*(3), 268-273. doi: 10.1016/j.ijnss.2016.08.002
- Campinha-Bacote, J. (1999). A model and instrument for addressing cultural competence in health care. *Journal of Nursing Education, 38*(5), 203- 207. Retrieved from <http://web.a.ebscohost.com.ezproxy.uwindsor.ca/ehost/pdfviewer/pdfviewer?sid=5b811a52-4bfe-4b5a-92fe-ed99c43baec2%40sessionmgr4007&vid=1&hid=4201>
- Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing, 13*(3), 181-184. Retrieved from http://s3.amazonaws.com/academia.edu.documents/5676826/process_of_cultural_competence.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1484190736&Signature=0Y%2FmgVtuPNyh8iQ98ucspP3kHw0%3D&response-content-

disposition=inline%3B%20filename%3DThe_process_of_cultural_competence_i
n_th.pdf

Canadian Nurses Association (CNA). (2010). *Position statement: Promoting cultural competence in nursing*. Retrieved from https://www.cna-aiic.ca/~media/cna/page-content/pdf-en/6%20-%20ps114_cultural_competence_2010_e.pdf?la=en

Capell, J., Veenstra, G., & Dean, E. (2007). Cultural competence in healthcare: Critical analysis of the construct, its assessment and implications. *Journal of Theory Construction & Testing*, 11(1), 30-37. Retrieved from <http://search.proquest.com.ezproxy.uwindsor.ca/docview/219173468?accountid=14789>

Carle, A. C., Weech-Maldonado, R., Ngo-Metzger, Q., & Hays, R. D. (2012). Evaluating measurement equivalence across race and ethnicity on the CAHPS® Cultural Competence survey. *Medical Care*, 50(9 Suppl 2), S32. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3471087/>

Carter, K. F., & Kulbok, P. A. (1995). Evaluation of the interaction model of client health behavior through the first decade of research. *Advances in Nursing Science*, 18(1), 62-73. Retrieved from http://journals.lww.com/advancesinnursingscience/Abstract/1995/09000/Evaluation_of_the_Interaction_Model_of_Client.7.aspx

Clancy, C., Brach, C., & Abrams, M. (2012). Assessing patient experiences of providers' cultural competence and health literacy practices: CAHPS® item sets. *Medical Care*, 50, S1-S2. Retrieved from <http://journals.lww.com/lww->

medicalcare/Citation/2012/09002/Assessing_Patient_Experiences_of_Providers_.
3.aspx

Cox, C. L. (1982). An interaction model of client health behavior: Theoretical prescription for nursing. *Advances in Nursing Science*, 5(1), 41-56. Retrieved from http://journals.lww.com/advancesinnursingscience/Citation/1982/10000/An_interaction_model_of_client_health_behavior_.7.aspx

Cox, C. L. (1986). The interaction model of client health behavior: Application to the study of community-based elders. *Advances in Nursing Science*, 9(1), 40-57. doi: 10.1097/00012272-198610000-00007

Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed-method approaches* (4th ed.). Thousand Oaks, CA: Sage

Cross, T.L., Bazron, B.J., Dennis, K.W., & Isaacs, M.R. (1989). Towards a culturally competent system of care: Vol. 1. A monograph on effective services for minority children who are severely emotionally disturbed. Washington, DC: Georgetown University, Child and Adolescent Service System Program (CASSP), Technical Assistance Center.

Damashek, A., Bard, D., & Hecht, D. (2012). Provider cultural competency, client satisfaction, and engagement in home-based programs to treat child abuse and neglect. *Child Maltreatment*, 17(1), 56-66. doi: 10.1177/1077559511423570

De Maio, F. G., & Kemp, E. (2010). The deterioration of health status among immigrants to Canada. *Global Public Health*, 5(5), 462-478. doi: 10.1080/17441690902942480

- Dean, J. A., & Wilson, K. (2010). "My health has improved because I always have everything I need here...": A qualitative exploration of health improvement and decline among immigrants. *Social Science & Medicine*, 70(8), 1219-1228. doi: 10.1016/j.socscimed.2010.01.009
- Derose, K. P., Escarce, J. J., & Lurie, N. (2007). Immigrants and health care: Sources of vulnerability. *Health Affairs*, 26(5), 1258-1268. doi: 10.1377/hlthaff.26.5.1258
- Dharssi, A. (2016, September 19). Skilled immigrants wasting their talents in Canada. *Calgary Herald*. Retrieved from <http://calgaryherald.com/storyline/skilled-immigrants-wasting-their-talents-in-canada>
- Dudas, K. I. (2012). Cultural competence: An evolutionary concept analysis. *Nursing Education Perspectives*, 33(5), 317-321. Retrieved from <http://search.proquest.com.ezproxy.uwindsor.ca/docview/1086347577?accountid=14789>
- Edge, S., & Newbold, B. (2013). Discrimination and the health of immigrants and refugees: Exploring Canada's evidence base and directions for future research in newcomer receiving countries. *Journal of Immigrant and Minority Health*, 15(1), 141-148. doi: 10.1007/s10903-012-9640-4
- El-Masri, M. M. (2016a). *Correlation: Pearson moment, Kendall Tau, and Spearman's rank, Week 3 notes* [PowerPoint slides]. Advanced Statistics, Faculty of Nursing, University of Windsor, Ontario, Canada.
- El-Masri, M. M. (2016b). *Introduction to Linear Regression Analysis, Week 9 notes* [PowerPoint slides]. Advanced Statistics, Faculty of Nursing, University of Windsor, Ontario, Canada.

- El-Masri, M. M., & Fox-Wasylyshyn, S. M. (2005). Missing data: An introductory conceptual overview for the novice researcher. *CJNR (Canadian Journal of Nursing Research)*, 37(4), 156-171. Retrieved from <http://www.ingentaconnect.com/content/mcgill/cjnr/2005/00000037/00000004/art00010?crawler=true>
- Fernandez, A., Seligman, H., Quan, J., Stern, R. J., & Jacobs, E. A. (2012). Associations between aspects of culturally competent care and clinical outcomes among patients with diabetes. *Medical Care*, 50(9), S74-S79. Retrieved from http://journals.lww.com/lww-medicalcare/Abstract/2012/09002/Associations_Between_Aspects_of_Culturally.14.aspx
- Flores, G. (2005). The impact of medical interpreter services on the quality of health care: A systematic review. *Medical Care Research and Review*, 62(3), 255-299. doi: 10.1177/1077558705275416
- Fugl-Meyer, A. R., Melin, R., & Fugl-Meyer, K. S. (2002). Life satisfaction in 18-to 64-year-old Swedes: in relation to gender, age, partner and immigrant status. *Journal of Rehabilitation Medicine*, 34(5), 239-246. Retrieved from https://medicaljournals.se/jrm/content_files/download.php?doi=10.1080/165019702760279242
- Gee, G. C., & Ponce, N. (2010). Associations between racial discrimination, limited English proficiency, and health-related quality of life among 6 Asian ethnic groups in California. *American Journal of Public Health*, 100(5), 888-895. doi: 10.2105/AJPH.2009.178012

- Gerlach, A. J. (2012). A critical reflection on the concept of cultural safety. *Canadian Journal of Occupational Therapy, 79*(3), 151-158. doi: 10.2182/cjot.2012.79.3.4
- Grimm, P. (2010). Social desirability bias. Wiley international encyclopedia of marketing. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/9781444316568.wiem02057/abstract?userIsAuthenticated=false&deniedAccessCustomisedMessage=>
- Gushulak, B. D., Pottie, K., Roberts, J. H., Torres, S., & DesMeules, M. (2011). Migration and health in Canada: Health in the global village. *Canadian Medical Association Journal, 183*(12), E952-E958. doi: 10.1503/cmaj.090287
- Hillen, M. A., de Haes, H. C., Verdam, M. G., & Smets, E. M. (2017). Trust and perceptions of physicians' nonverbal behavior among women with immigrant backgrounds. *Journal of Immigrant and Minority Health, 1*-9. doi: 10.1007/s10903-017-0580-x
- Hooper, L. M., & Huffman, L. E. (2014). Associations among depressive symptoms, well-being, patient involvement, provider cultural competency, and treatment nonadherence: An exploratory study among university student-patients. *Counselling Psychology Quarterly, 27*(3), 241-263. doi: 10.1080/09515070.2014.880046
- Hosmer, D.W., & Lemeshow, S. (Eds.). (2001). *Applied logistic regression*. New York: Wiley.
- Hyman, I. (2009). Racism as a determinant of immigrant health. *Ottawa: Strategic Initiatives and Innovations Directorate of the Public Health Agency of Canada*. Retrieved from

https://www.researchgate.net/profile/Ilene_Hyman/publication/255654375_Racism_as_a_determinant_of_immigrant_health/links/54abee2a0cf2bce6aa1dd292/Racism-as-a-determinant-of-immigrant-health.pdf

- Ihara, E. (2004). Cultural competence in health care: Is it important for people with chronic conditions? *The Center on an Aging Society, Georgetown Health Policy Institute, 5*. Retrieved from <https://hpi.georgetown.edu/agingsociety/pubhtml/cultural/cultural.html>
- Jacobs, E. A., Shepard, D. S., Suaya, J. A., & Stone, E. L. (2004). Overcoming language barriers in health care: Costs and benefits of interpreter services. *American Journal of Public Health, 94*(5), 866-869. doi: 10.2105/AJPH.94.5.866
- Jirwe, M., Gerrish, K., & Emami, A. (2006). The theoretical framework of cultural competence. *Journal of Multicultural Nursing & Health, 12*(3), 6-16. Retrieved from <http://search.proquest.com.ezproxy.uwindsor.ca/docview/220295225?accountid=14789>
- Kagawa-Singer, M., & Kassim-Lakha, S. (2003). A strategy to reduce cross-cultural miscommunication and increase the likelihood of improving health outcomes. *Academic Medicine, 78*(6), 577-587. Retrieved from http://journals.lww.com/academicmedicine/Abstract/2003/06000/A_Strategy_to_Reduce_Cross_cultural.6.aspx
- Kalich, A., Heinemann, L., & Ghahari, S. (2016). A scoping review of immigrant experience of health care access barriers in Canada. *Journal of Immigrant and Minority Health, 18*(3), 697-709. doi: 10.1007/s10903-015-0237-6

- Karliner, L. S., Jacobs, E. A., Chen, A. H., & Mutha, S. (2007). Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Health Services Research, 42*(2), 727-754. doi: 10.1111/j.1475-6773.2006.00629.x
- Kerfeld, C. I., Hoffman, J. M., Ciol, M. A., & Kartin, D. (2011). Delayed or forgone care and dissatisfaction with care for children with special health care needs: The role of perceived cultural competency of health care providers. *Maternal and Child Health Journal, 15*(4), 487-496. doi: 10.1007/s10995-010-0598-3
- Kirmayer, L. J., Narasiah, L., Munoz, M., Rashid, M., Ryder, A. G., Guzder, J., ... & Pottie, K. (2011). Common mental health problems in immigrants and refugees: General approach in primary care. *Canadian Medical Association Journal, 183*(12), E959-E967. doi: 10.1503/cmaj.090292
- Ku, L., & Flores, G. (2005). Pay now or pay later: Providing interpreter services in health care. *Health Affairs, 24*(2), 435-444. doi: 10.1377/hlthaff.24.2.435
- Kumagai, A. K., & Lypton, M. L. (2009). Beyond cultural competence: Critical consciousness, social justice, and multicultural education. *Academic Medicine, 84*(6), 782-787. Retrieved from http://s3.amazonaws.com/academia.edu.documents/37485996/KumagaiLypton_BeyondCulturalCompetence.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1488680431&Signature=KDz8I%2FOZPeIf82M3aR%2B2rdqwZPc%3D&response-content-disposition=inline%3B%20filename%3DBeyond_cultural_competence_critical_cons.pdf

- Kumas-Tan, Z., Beagan, B., Loppie, C., MacLeod, A., & Frank, B. (2007). Measures of cultural competence: Examining hidden assumptions. *Academic Medicine*, 82(6), 548-557. Retrieved from https://www.researchgate.net/profile/Anna_Macleod2/publication/6306500_Measures_of_Cultural_Competence_Examining_Hidden_Assumptions/links/0deec51a39b07e2148000000.pdf
- Leininger, M. M. (1988). Leininger's theory of nursing: Cultural care diversity and universality. *Nursing Science Quarterly*, 1(4), 152-160. doi: 10.1177/089431848800100408
- Leininger, M. M. (1991). The theory of culture care diversity and universality. In M. M. Leininger (Ed.), *Culture care diversity and universality: A theory of nursing* (pp. 5-65). New York: National League for Nursing.
- Leu, J., Yen, I. H., Gansky, S. A., Walton, E., Adler, N. E., & Takeuchi, D. T. (2008). The association between subjective social status and mental health among Asian immigrants: Investigating the influence of age at immigration. *Social Science & Medicine*, 66(5), 1152-1164. doi:10.1016/j.socscimed.2007.11.028
- Lie, D. A., Lee-Rey, E., Gomez, A., Bereknyci, S., & Braddock III, C. H. (2011). Does cultural competency training of health professionals improve patient outcomes? A systematic review and proposed algorithm for future research. *Journal of General Internal Medicine*, 26(3), 317-325. doi: 10.1007/s11606-010-1529-0
- Liu, R., So, L., & Quan, H. (2007). Chinese and white Canadian satisfaction and compliance with physicians. *BMC Family Practice*, 8(1), 11. doi: 10.1186/1471-2296-8-11

- Loftin, C., Hartin, V., Branson, M., & Reyes, H. (2013). Measures of cultural competence in nurses: An integrative review. *The Scientific World Journal*, 2013. doi: 10.1155/2013/289101
- Lucas, T., Michalopoulou, G., Falzarano, P., Menon, S., & Cunningham, W. (2008). Healthcare provider cultural competency: Development and initial validation of a patient report measure. *Health Psychology*, 27(2), 185-193. doi: 10.1037/0278-6133.27.2.185
- Lund Research Ltd. (2013). One-way ANOVA in SPSS statistics. *Laerd Statistics*. Retrieved from <https://statistics.laerd.com/spss-tutorials/one-way-anova-using-spss-statistics.php>
- Lyubomirsky, S. (2013, August 1). Do children bring happiness or misery? *Life & Style*. Retrieved from <http://ideas.time.com/2013/08/01/do-children-bring-happiness-or-misery/>
- Maleku, A., & Aguirre, R. T. (2014). Culturally competent health care from the immigrant lens: A qualitative interpretive meta-synthesis (QIMS). *Social Work in Public Health*, 29(6), 561-580. doi: 10.1080/19371918.2014.893417
- MaRgolis, R., & MyRskylä, M. (2011). A global perspective on happiness and fertility. *Population and Development Review*, 37(1), 29-56. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3345518/?utm_content=bufferedde0&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer&escaped_fragment_=po=2.63158
- Mathews, S. K., Secrest, J., & Muirhead, L. (2008). The interaction model of client health behavior: A model for advanced practice nurses. *Journal of the American*

Academy of Nurse Practitioners, 20(8), 415-422. doi: 10.1111/j.1745-7599.2008.00343.x

McDonald, J. T., & Kennedy, S. (2004). Insights into the 'healthy immigrant effect': Health status and health service use of immigrants to Canada. *Social Science & Medicine*, 59(8), 1613-1627. doi: 10.1016/j.socscimed.2004.02.004

McKeary, M., & Newbold, B. (2010). Barriers to care: The challenges for Canadian refugees and their health care providers. *Journal of Refugee Studies*, 23(4), 523-545. doi: 10.1093/jrs/feqO38

McKinley, R. K., Stevenson, K., Adams, S., & Manku-Scott, T. K. (2002). Meeting patient expectations of care: The major determinant of satisfaction with out-of-hours primary medical care? *Family Practice*, 19(4), 333-338.
<https://doi.org/10.1093/fampra/19.4.333>

Michalopoulou, G., Falzarano, P., Arfken, C., & Rosenberg, D. (2009). Physicians' cultural competency as perceived by African American patients. *Journal of the National Medical Association*, 101(9), 893-899. Retrieved from <http://ezproxy.uwindsor.ca/login?url=http://search.proquest.com/docview/214039530?accountid=14789>

Michalopoulou, G., Falzarano, P., Butkus, M., Zeman, L., Vershave, J., & Arfken, C. (2014). Linking cultural competence to functional life outcomes in mental health care settings. *Journal of the National Medical Association*, 106, 42-49. Retrieved from <http://search.proquest.com.ezproxy.uwindsor.ca/docview/1558468094?accountid=14789>

- Mui, A. C., Kang, S. Y., Kang, D., & Domanski, M. D. (2007). English language proficiency and health-related quality of life among Chinese and Korean immigrant elders. *Health & Social Work, 32*(2), 119-127. Retrieved from <https://search.proquest.com/docview/210560778/fulltextPDF/D4D94A3CAB0A4C22PQ/1?accountid=14789>
- Müller, E., Zill, J. M., Dirmaier, J., Härter, M., & Scholl, I. (2014). Assessment of trust in physician: A systematic review of measures. *PLoS One, 9*(9), e106844. <https://doi.org/10.1371/journal.pone.0106844>
- Nápoles, A. M., Santoyo-Olsson, J., Farren, G., Olmstead, J., Cabral, R., Ross, B., ... & Stewart, A. L. (2012). The patient-reported Clinicians' Cultural Sensitivity Survey: A field test among older Latino primary care patients. *Health Expectations, 15*(1), 63-77. doi: 10.1111/j.1369-7625.2010.00654.x
- National Aboriginal Health Organization (NAHO). (2006). *Fact sheet: Cultural safety*. Retrieved from <http://www.naho.ca/documents/naho/english/Culturalsafetyfactsheet.pdf>
- National Quality Forum. A Comprehensive Framework and Preferred Practices for Measuring and Reporting Cultural Competency. Washington DC: National Quality Forum; 2008. Retrieved from http://www.qualityforum.org/Publications/2009/04/A_Comprehensive_Framework_and_Preferred_Practices_for_Measuring_and_Reporting_Cultural_Competency.aspx

- Newbold, B. (2009). The short-term health of Canada's new immigrant arrivals: Evidence from LSIC. *Ethnicity & Health, 14*(3), 315-336. doi: 10.1080/13557850802609956
- Newbold, K. B. (2005). Self-rated health within the Canadian immigrant population: Risk and the healthy immigrant effect. *Social Science & Medicine, 60*(6), 1359-1370. doi: 10.1016/j.socscimed.2004.06.048
- Ngo-Metzger, Q., Legedza, A. T., & Phillips, R. S. (2004). Asian Americans' reports of their health care experiences. *Journal of General Internal Medicine, 19*(2), 111-119. doi: 10.1111/j.1525-1497.2004.30143.x
- Ngo-Metzger, Q., Sorkin, D. H., Phillips, R. S., Greenfield, S., Massagli, M. P., Clarridge, B., & Kaplan, S. H. (2007). Providing high-quality care for limited English proficient patients: The importance of language concordance and interpreter use. *Journal of General Internal Medicine, 22*(2), 324-330. doi: 10.1007/s11606-007-0340-z
- Ngo-Metzger, Q., Telfair, J., Sorkin, D. H., Weidmer, B., Weech-Maldonado, R., Hurtado, M., & Hays, R. D. (2006). Cultural competency and quality of care: Obtaining the patient's perspective. Retrieved from http://s3.amazonaws.com/academia.edu.documents/39074331/ngo-metzger_cultcompqualitycareobtainpatientperspect_963.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1475695492&Signature=wIS3HfhVUhkRcKCuYT7HCaLd21w%3D&response-content-disposition=inline%3B%20filename%3DCultural_Competency_and_Quality_of_Care.pdf

- Noh, S., Beiser, M., Kaspar, V., Hou, F., & Rummens, J. (1999). Perceived racial discrimination, depression, and coping: A study of Southeast Asian refugees in Canada. *Journal of Health and Social Behavior*, 193-207. doi: 10.2307/2676348
- Oelke, N. D., Thurston, W. E., & Arthur, N. (2013). Intersections between interprofessional practice, cultural competency and primary healthcare. *Journal of Interprofessional Care*, 27(5), 367-372. doi: 10.3109/13561820.2013.785502
- O'Hagan, K. (2001). *Cultural competence in the Caring Professions*. London: Jessica Kingsley Publishers.
- O'Mahony, J. M., & Donnelly, T. T. (2007). The influence of culture on immigrant women's mental health care experiences from the perspectives of health care providers. *Issues in Mental Health Nursing*, 28(5), 453-471. doi: 10.1080/01612840701344464
- Pappas, S. (2011, March 8). Children make parents happy eventually. Retrieved from <https://www.livescience.com/13114-children-parents-happy-eventually.html>
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135(4), 531-554. doi:10.1037/a0016059
- Picot, W. G. (2008). *Immigrant economic and social outcomes in Canada: Research and data development at Statistics Canada*. Ottawa: Statistics Canada. Retrieved from https://www.researchgate.net/profile/Garnett_Picot/publication/23692080_Immigrant_Economic_and_Social_Outcomes_in_Canada_Research_and_Data_Development_at_Statistics_Canada/links/5756d38608ae05c1ec169904/Immigrant-

Economic-and-Social-Outcomes-in-Canada-Research-and-Data-Development-at-Statistics-Canada.pdf

Polaschek, N. R. (1998). Cultural Safety: A new concept in nursing people of different ethnicities. *Journal of Advanced Nursing*, 27(3), 452-457. Retrieved from http://journals1.scholarsportal.info.ezproxy.uwindsor.ca/pdf/03092402/v27i0003/452_csancinpode.xml

Purnell, L. D., & Paulanka, B. J. (1998). Transcultural diversity and health care. In L. D. Purnell & B. J. Paulanka (Ed.), *Transcultural Health Care: A Culturally Competent Approach*. (pp. 1-50). Philadelphia: F.A. Davis.

Quigley, D. D., Martino, S. C., Brown, J. A., & Hays, R. D. (2013). Evaluating the content of the communication items in the CAHPS® Clinician and Group Survey and supplemental items with what high-performing physicians say they do. *The Patient-Patient-Centered Outcomes Research*, 6(3), 169-177. doi: 10.1007/s40271-013-0016-1

Registered Nurses' Association of Ontario (RNAO). (2007). Embracing cultural diversity in health care: Developing cultural competence. *Healthy Work Environments Best Practice Guidelines*. Retrieved from http://rnao.ca/sites/rnao-ca/files/Embracing_Cultural_Diversity_in_Health_Care_-_Developing_Cultural_Competence.pdf

Renzaho, A. M. N., Romios, P., Crock, C., & Sønderlund, A. L. (2013). The effectiveness of cultural competence programs in ethnic minority patient-centered health care— A systematic review of the literature. *International Journal for Quality in Health Care*, 25(3), 261-269. doi: 10.1093/intqhc/mzt006

- Robinson, C. H., & Thomas, S. P. (2004). The interaction model of client health behavior as a conceptual guide in the explanation of children's health behaviors. *Public Health Nursing, 21*(1), 73-84. doi: 10.1111/j.1525-1446.2004.21110.x
- Rogers-Sirin, L., Melendez, F., Refano, C., & Zegarra, Y. (2015). Immigrant perceptions of therapists' cultural competence: A qualitative investigation. *Professional Psychology: Research and Practice, 46*(4), 258-269. doi: 10.1037/pro0000033
- Saha, S., Arbelaez, J. J., & Cooper, L. A. (2003). Patient-physician relationships and racial disparities in the quality of health care. *American Journal of Public Health, 93*(10), 1713-1719. doi: 10.2105/AJPH.93.10.1713
- Saha, S., Beach, M. C., & Cooper, L. A. (2008). Patient centeredness, cultural competence and healthcare quality. *Journal of the National Medical Association, 100*(11), 1275-1285. Retrieved from <http://search.proquest.com.ezproxy.uwindsor.ca/docview/214047321?accountid=14789>
- Saha, S., Komaromy, M., Koepsell, T. D., & Bindman, A. B. (1999). Patient-physician racial concordance and the perceived quality and use of health care. *Archives of Internal Medicine, 159*(9), 997-1004. Retrieved from <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/485025>
- Setia, M. S., Lynch, J., Abrahamowicz, M., Tousignant, P., & Quesnel-Vallee, A. (2011). Self-rated health in Canadian immigrants: Analysis of the Longitudinal Survey of Immigrants to Canada. *Health & Place, 17*(2), 658-670. doi: 10.1016/j.healthplace.2011.01.006

- Shaya, F. T., & Gbarayor, C. M. (2006). The case for cultural competence in health professions education. *American Journal of Pharmaceutical Education*, 70(6), 124. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1803701/>
- Shen, Z. (2015). Cultural competence models and cultural competence assessment instruments in nursing: A literature review. *Journal of Transcultural Nursing*, 26(3), 308-321. doi: 10.1177/1043659614524790
- Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. A report from the WHOQOL group. *Quality of life Research*, 13(2), 299-310. doi: 10.1023/B:QURE.0000018486.91360.00
- Smith, L. S. (2013). Reaching for cultural competence. *Nursing*, 34(3), 30-37. doi: 10.1097/PSN.0000000000000059
- Sorkin, D. H., Ngo-Metzger, Q., & De Alba, I. (2010). Racial/ethnic discrimination in health care: Impact on perceived quality of care. *Journal of General Internal Medicine*, 25(5), 390-396. doi: 10.1007/s11606-010-1257-5
- Soulé, I. (2014). Cultural competence in health care: An emerging theory. *Advances in Nursing Science*, 37(1), 48-60. doi: 10.1097/ANS.0000000000000016
- Srivastava, R. (2007). *The healthcare professional's guide to clinical cultural competence*. Elsevier Health Sciences. Retrieved from <https://books.google.ca/books?id=skFDcN-L4CEC&printsec=frontcover#v=onepage&q&f=false>

- Statistics Canada. (2013). Immigration and ethnocultural diversity in Canada: National Household Survey, 2011. Retrieved from <https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011001-eng.cfm>
- Stern, R. J., Fernandez, A., Jacobs, E. A., Neilands, T. B., Weech-Maldonado, R., Quan, J., ... & Seligman, H. K. (2012). Advances in measuring culturally competent care: A confirmatory factor analysis of CAHPS-CC in a safety-net population. *Medical Care*, *50*(9 Suppl 2), S49-S55. doi: 10.1097/MLR.0b013e31826410fb
- Stewart, M. J., Neufeld, A., Harrison, M. J., Spitzer, D., Hughes, K., & Makwarimba, E. (2006). Immigrant women family caregivers in Canada: Implications for policies and programmes in health and social sectors. *Health & Social Care in the Community*, *14*(4), 329-340. doi: 10.1111/j.1365-2524.2006.00627.x
- Subedi, R. P., & Rosenberg, M. W. (2014). Determinants of the variations in self-reported health status among recent and more established immigrants in Canada. *Social Science & Medicine*, *115*, 103-110. doi: 10.1016/j.socscimed.2014.06.021
- Suh, E. E. (2004). The model of cultural competence through an evolutionary concept analysis. *Journal of Transcultural Nursing*, *15*(2), 93-102. doi: 10.1177/1043659603262488
- Suurmond, J., Uiters, E., de Bruijne, M. C., Stronks, K., & Essink-Bot, M. L. (2011). Negative health care experiences of immigrant patients: A qualitative study. *BMC Health Services Research*, *11*(1), 10. <https://doi.org/10.1186/1472-6963-11-10>

- Swanson, A. (2016, July 6). Many parents will say kids make them happier. They're probably lying. *The Washington Post*. Retrieved from https://www.washingtonpost.com/news/wonk/wp/2016/07/06/many-americans-will-tell-you-having-kids-made-them-happier-theyre-probably-lying/?utm_term=.9e1eb76de524
- Switzer, G. E., Scholle, S. H., Johnson, B. A., & Kelleher, K. J. (1998). The Client Cultural Competence Inventory: An instrument for assessing cultural competence in behavioral managed care organizations. *Journal of Child and Family Studies*, 7(4), 483-491. Retrieved from http://journals1.scholarsportal.info.ezproxy.uwindsor.ca/pdf/10621024/v07i0004/483_tccciacibmco.xml
- Sword, W., Watt, S., & Krueger, P. (2006). Postpartum health, service needs, and access to care experiences of immigrant and Canadian-born women. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 35(6), 717-727. doi:10.1111/j.1552-6909.2006.00092.x
- The Pennsylvania State University. (2018). 10.2 - Stepwise regression. Retrieved from <https://onlinecourses.science.psu.edu/stat501/node/329>
- Thom, D. H., & Tirado, M. D. (2006). Development and validation of a patient-reported measure of physician cultural competency. *Medical Care Research and Review*, 63(5 Suppl 2), 636-655. doi: 10.1177/1077558706290946
- Thom, D. H., Hall, M. A., & Pawlson, L. G. (2004). Measuring patients' trust in physicians when assessing quality of care. *Health Affairs*, 23(4), 124-132. doi: 10.1377/hlthaff.23.4.124

- Traylor, A. H., Schmittiel, J. A., Uratsu, C. S., Mangione, C. M., & Subramanian, U. (2010). Adherence to cardiovascular disease medications: Does patient-provider race/ethnicity and language concordance matter? *Journal of General Internal Medicine*, 25(11), 1172-1177. doi: 10.1007/s11606-010-1424-8
- Troumbley, P. F., & Lenz, E. R. (1992). Application of Cox's interaction model of client health behavior in a weight control program for military personnel: A preintervention baseline. *Advances in Nursing Science*, 14(4), 65-78. Retrieved from http://journals.lww.com/advancesinnursingscience/Abstract/1992/06000/Application_of_Cox_s_interaction_model_of_client.8.aspx
- Viruell-Fuentes, E. A., Miranda, P. Y., & Abdulrahim, S. (2012). More than culture: Structural racism, intersectionality theory, and immigrant health. *Social Science & Medicine*, 75(12), 2099-2106. doi:10.1016/j.socscimed.2011.12.037
- Walker, L. O., & Avant, K. C. (1995). *Strategies for Theory Construction in Nursing* (3rd ed.). Norwalk, CT: Appleton & Lange.
- Wang, L. (2014). Immigrant health, socioeconomic factors and residential neighbourhood characteristics: A comparison of multiple ethnic groups in Canada. *Applied Geography*, 51, 90-98. doi: 10.1016/j.apgeog.2014.03.010
- Wang, L., & Hu, W. (2013). Immigrant health, place effect and regional disparities in Canada. *Social Science & Medicine*, 98, 8-17. doi: 10.1016/j.socscimed.2013.08.040

- Warren, B. J. (1999). Cultural competence in psychiatric nursing: An interlocking paradigm approach. In N. L. Keltner, L. H. Schwecke, & C. E. Bostrom (Eds.), *Psychiatric Nursing* (3rd ed., pp. 199-218). Philadelphia: Mosby.
- Weech-Maldonado, R., Carle, A., Weidmer, B., Hurtado, M., Ngo-Metzger, Q., & Hays, R. D. (2012). The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Cultural Competence (CC) Item Set. *Medical Care*, *50*(9 0 2), S22-S31. doi:10.1097/MLR.0b013e318263134b
- Wepa, D. (2003). An exploration of the experiences of cultural safety educators in New Zealand: An action research approach. *Journal of Transcultural Nursing*, *14*(4), 339-348. doi: 10.1177/1043659603257341
- WHOQOL Group. (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine*, *28*(3), 551-558. doi: 10.1017/S0033291798006667
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, *32*(1), 20-47. doi:10.1007/s10865-008-9185-0
- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health*, *93*(2), 200-208. doi: 10.2105/AJPH.93.2.200
- World Health Organization. (1996). WHOQOL-BREF: Introduction, administration, scoring and generic version of the assessment: Field trial version, December 1996. Retrieved from http://www.who.int/mental_health/media/en/76.pdf

World Health Organization. (1998). Programme on mental health: WHOQOL user manual. Retrieved from

http://cdrwww.who.int/mental_health/evidence/who_qol_user_manual_98.pdf

World Health Organization. (2004). The World Health Organization Quality Of Life (WHOQOL)-BREF. Retrieved from

http://www.who.int/substance_abuse/research_tools/en/english_whoqol.pdf

Zander, P. E. (2006). Cultural competence: Analyzing the construct. *Journal of Theory Construction and Testing*, 11(2), 50-54. Retrieved from

<http://search.proquest.com.ezproxy.uwindsor.ca/docview/869067479?accountid=14789>

APPENDICES

Appendix A

Study Questionnaire

Section 1: Utilization of Health Care Services

Please answer the following questions by marking an (X) for your response.

1. **When was your last visit with a healthcare provider?**
 - Less than 6 months ago
 - 6 months to one year ago
 - Between one year and two years ago
 - More than two years ago
2. **Do you have a regular or primary healthcare provider?**
 - Yes
 - No
3. **What kind of healthcare provider do you visit?**
 - Family Doctor or Physician
 - Nurse Practitioner
 - Other: _____
4. **In the last 12 months, how many times have you visited this healthcare provider?**
 - 0 times
 - 1-2 times
 - 3-4 times
 - 5+ times
5. **In the last 12 months, how many times have you visited a walk-in clinic?**
 - 0 times
 - 1-2 times
 - 3-4 times
 - 5+ times
6. **In the last 12 months, how many times have you visited an urgent-care clinic or the emergency department?**
 - 0 times
 - 1-2 times
 - 3-4 times
 - 5+ times

Section 2: Consumer Assessment of Healthcare Providers and Systems (CAHPS) Cultural Competency (CC) (AHRQ, 2012)

To answer the following questions, please consider your primary healthcare provider or the healthcare provider who you visited most often during the last 12 months.

1. **In the last 12 months, how often were the explanations this provider gave you hard to understand because of an accent or the way the provider spoke English?**
 - Never
 - Sometimes
 - Usually
 - Always
2. **In the last 12 months, how often did this provider use medical words you did not understand?**
 - Never
 - Sometimes
 - Usually
 - Always
3. **In the last 12 months, how often did this provider talk too fast when talking with you?**
 - Never
 - Sometimes
 - Usually
 - Always
4. **In the last 12 months, how often did this provider ignore what you told him/her?**
 - Never
 - Sometimes
 - Usually
 - Always
5. **In the last 12 months, how often did this provider interrupt you when you were talking?**
 - Never
 - Sometimes
 - Usually
 - Always
6. **In the last 12 months, how often did this provider show interest in your questions and concerns?**
 - Never
 - Sometimes
 - Usually
 - Always
7. **In the last 12 months, how often did this provider answer all your questions to your satisfaction?**
 - Never
 - Sometimes
 - Usually
 - Always
8. **In the last 12 months, how often did this provider use a condescending, sarcastic, or rude tone or manner with you?**
 - Never
 - Sometimes
 - Usually
 - Always

9. **People sometimes see someone else besides their providers or specialists to help with an illness or to stay healthy. In the last 12 months, have you ever used an acupuncturist?**
- Yes
 - No
10. **In the last 12 months, have you ever used a herbalist?**
- Yes
 - No
11. **In the last 12 months, has this provider ever asked you if you have used an acupuncturist or a herbalist to help with an illness or to stay healthy?**
- Yes
 - No
12. **Some people use natural herbs for health reasons or to stay healthy. Natural herbs include things such as ginseng, green tea, and other herbs. People can take them as a pill, a tea, oil, or a powder. In the last 12 months, have you ever used natural herbs for your own health?**
- Yes
 - No
13. **In the last 12 months, has this provider ever asked you if you used natural herbs?**
- Yes
 - No
14. **In the last 12 months, how often have you been treated unfairly at this provider's office because of your race or ethnicity?**
- Never
 - Sometimes
 - Usually
 - Always
15. **In the last 12 months, how often have you been treated unfairly at this provider's office because of the type of health insurance you have or because you do not have health insurance?**
- Never
 - Sometimes
 - Usually
 - Always
16. **In the last 12 months, did you feel you could tell this provider anything, even things that you might not tell anyone else?**
- Yes, definitely
 - Yes, somewhat
 - No
17. **In the last 12 months, did you feel you could trust this provider with your medical care?**
- Yes, definitely
 - Yes, somewhat
 - No
18. **In the last 12 months, did you feel that this provider always told you the truth about your health, even if there was bad news?**
- Yes, definitely
 - Yes, somewhat
 - No

19. In the last 12 months, did you feel this provider cared as much as you do about your health?

- Yes, definitely
- Yes, somewhat
- No

20. In the last 12 months, did you feel this provider really cared about you as a person?

- Yes, definitely
- Yes, somewhat
- No

21. Using any number from 0 to 10, where 0 means that you do not trust this provider at all and 10 means that you trust this provider completely, what number would you use to rate how much you trust this provider?

- 0 - Do not trust this provider at all
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 - Trust this provider completely

22. What is your preferred language?

- English
- French
- Other:

23. How well do you speak English?

- Very well → *If Very well, go to question #25*
- Well
- Not well
- Not at all

24. In the last 12 months, how often were you treated unfairly at this provider's office because you did not speak English very well?

- Never
- Sometimes
- Usually
- Always

25. An interpreter is someone who helps you talk with others who do not speak your language. Interpreters can include staff from the provider's office or telephone interpreters. In the last 12 months, was there any time when you needed an interpreter at this provider's office?

- Yes
- No → *If No, go to Q#33*

26. In the last 12 months, did anyone in this provider's office let you know that an interpreter was available free of charge?

- Yes
- No

27. In the last 12 months, how often did you use an interpreter provided by this office to help you talk with this provider?

- Never → *If Never, go to Q#33*
- Sometimes
- Usually
- Always

28. In the last 12 months, when you used an interpreter provided by this office, who was the interpreter you used most often?

- A nurse, clerk, or receptionist from this office
- An interpreter provided in person in this office
- A telephone interpreter provided by this office
- Someone else provided by this office

29. In the last 12 months, how often did this interpreter treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always

30. Using any number from 0 to 10, where 0 is the worst interpreter possible and 10 is the best interpreter possible, what number would you use to rate this interpreter?

- 0 - Worst interpreter possible
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 - Best interpreter possible

31. In the last 12 months, did any of your appointments with this provider start late?

- Yes
- No → *If No, go to Q#33*

32. Did any of your appointments start late because you had to wait for an interpreter?

- Yes
- No

33. In the last 12 months, how often did you use a friend or family member as an interpreter when you talked with this provider?

- Never
- Sometimes
- Usually
- Always

34. In the last 12 months, did you use friends or family members as interpreters because that was what you preferred?

- Yes
- No

Section 3: Satisfaction with Care

Please circle your response.

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Overall, how satisfied are you with the health care you have received in the last 12 months?	1	2	3	4	5

Section 4: WHOQOL-BREF (WHOQOL Group, 1998)

This assessment asks how you feel about your quality of life, health, or other areas of your life.

Please answer all the questions. If you are unsure about which response to give to a question, **please choose the one** that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last two weeks**. **Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.**

		Very poor	Poor	Neither poor nor good	Good	Very good
1.	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2.	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the last two weeks.

		Not at all	A little	A moderate amount	Very much	An extreme amount
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	5	4	3	2	1
4.	How much do you need any medical treatment to function in your daily life?	5	4	3	2	1

5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
7.	How well are you able to concentrate?	1	2	3	4	5
8.	How safe do you feel in your daily life?	1	2	3	4	5
9.	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.

		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither poor nor good	Good	Very good
15.	How well are you able to get around?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks.

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with your sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5
19.	How satisfied are you with yourself?	1	2	3	4	5
20.	How satisfied are you with your personal relationships?	1	2	3	4	5
21.	How satisfied are you with your sex life?	1	2	3	4	5
22.	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23.	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24.	How satisfied are you with your access to health services?	1	2	3	4	5
25.	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to how often you have felt or experienced certain things in the last two weeks.

		Never	Seldom	Quite often	Very often	Always
26.	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	5	4	3	2	1

Section 5: Demographics

Please answer the following questions about yourself.

1. **Age:** _____ years
2. **Gender:** _____
3. **Marital status:**
 - Single, never married
 - Married or common law
 - Separated or divorced
 - Widowed
4. **Dependent children at home:**
 - Yes
 - No

If yes, how many children?

5. **Household Income:**
 - Less than \$35,000
 - \$35,000-\$50,000
 - \$51,000-\$75,000
 - More than \$75,000
6. **Highest level of Education:**
 - Less than high school
 - High school or equivalent
 - Community college/diploma
 - University degree
 - Graduate degree
7. **Employment status:**
 - Full-time
 - Part-time
 - Casual
 - Unemployed
 - Retired
8. **Country of Origin:**

9. **Length of time in Canada:**
Years _____ Months _____

Appendix B



LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: Exploring the Impact of Patient Perceptions of Health Care Provider Cultural Competence on Health-related Quality of Life among an Immigrant Population

You are asked to participate in a research study conducted by Afef Zghal, a registered nurse who is also a Master's student in Nursing, and her faculty advisor, Kathryn Pfaff, from the Faculty of Nursing at the University of Windsor.

If you have any questions or concerns about the research, please feel free to contact Afef Zghal at zghala@uwindsor.ca or Kathryn Pfaff at (519) 253-3000, ext. 4977.

PURPOSE OF THE STUDY

The purpose of this study is to explore new immigrant perceptions of health care provider cultural competence and how this affects health-related quality of life and satisfaction with healthcare. Simply put, we are interested in understanding your thoughts about how your health care providers (doctors, nurses) address your cultural health needs and how this affects your health and the care you receive.

PROCEDURES

If you volunteer to participate in this study, you will be asked to complete a pen and paper survey. The survey will include questions about yourself, your perspective on the cultural competence of health care providers, your use of health care services, your satisfaction with the health care you receive, and your overall quality of life.

This survey takes approximately 20-30 minutes to complete, depending on whether or not you need help from a language interpreter.

POTENTIAL RISKS AND DISCOMFORTS

There are no physical risks associated with this study. It is possible that you may find some questions to be personal or concerning. You may choose not to answer any questions that you feel are too personal or concerning to you. If you choose, you may stop participating in the survey until the point that you submit your survey in the locked box.

We will not be able to link the information you provide with your name, and your information will remain confidential, meaning we won't share it with anyone except the research team. The information you share will not affect your present or future care. A locked survey box will be used to submit your completed survey, and only Afef Zghal will have the key.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

It is unlikely that you will experience any direct benefits by participating in this study. However, you may gain some meaningful knowledge about yourself, and be able to reflect upon your previous health care experiences, and your health. It is also hoped that you will feel some satisfaction in knowing that you have added to the knowledge that health professionals have about how cultural competence affects the quality of life of immigrants in Windsor and Essex County.

The results of the study may assist nurses and other health care providers to develop actions to improve the practice of culturally competent care in various health care settings. As immigrants form a large and growing proportion of the Canadian population, understanding how this population experiences their health care is necessary in order to provide needed health promotion and prevention services.

COMPENSATION FOR PARTICIPATION

As compensation for taking the time to participate in this study, you will receive a \$5.00 Tim Hortons gift card.

CONFIDENTIALITY

Any information that is obtained in connection with this study will remain confidential and will be disclosed only with your permission. No personal identifiable information will be collected, and a locked survey box will be provided by the research team for you to submit your completed survey. Only the researcher, researcher assistant(s), and the researcher's committee directly associated with this study will have access to the data for the purposes of analysis.

The hard data will be entered into a database for data analysis, and stored on a password protected computer. Once the data is analyzed, the hard data will be destroyed by shredding. The electronic data may be kept on file for use in subsequent research studies. Any reports of this study made available to participants or sent to a scientific journal for publication will contain information that reflects group results and not information about specific individuals.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time before submitting your survey into the locked survey box, without consequences of any kind. You will still receive your Tim Horton's card, even if you withdraw before submitting your survey. Your decision to participate or not participate in this study will not affect the health care that you receive in any way. You may also refuse to answer any questions and still remain in the study. The investigator may withdraw you from this research if

circumstances arise which warrant doing so. All withdrawn data will be destroyed by shredding, and will not be used for data analysis.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

A summary of the study findings will be posted on the University of Windsor website under research findings.

Web address: www.uwindsor.ca

Date when results will be available: August 2018

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have any questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

Signature of Investigator

Date

VITA AUCTORIS

NAME: Afef Zghal

PLACE OF BIRTH: Winnipeg, MB

YEAR OF BIRTH: 1993

EDUCATION: Vincent Massey Secondary School, Windsor, ON, 2011

University of Windsor, B.Sc.N, Windsor, ON, 2015

University of Windsor, M.Sc.N, Windsor, ON, 2018