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Impact of Social Support Networks on Level of Stress and Self-Esteem Among Canadian Immigrants

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Abstract

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by

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MA, Central Michigan University, 2002

BS, Ryerson University, 1998

Dissertation Submitted in Partial Fulfillment

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Abstract

Immigration may be an effective survival strategy for individuals from countries involved in war or political unrest. However, the immigration process may exacerbate a number of physical and psychological health symptoms. There are limited data on the health status of new Canadian immigrants, and some social support networks are not formally connected to settlement programs. The purposes of this cross-sectional quantitative study were to assess the level of stress and self-esteem of 400 recent and older immigrants in Canada and to investigate the impact of social support networks on the mental well-being of recent immigrants. Cultural care and general adaptation theory provided the theoretical frameworks for the study. Results from logistic regression analyses indicated no significant differences in stress and self-esteem levels between recent and nonrecent immigrants. Results also indicated marginal significance for new immigrants with Hispanic ethnicity, who had lower stress scores than African immigrants (*OR:* 0.196, 95% *CI:* 0.034-1.150, $p < 0.071$). Afro-Caribbean recent immigrants had 4.36 odds of having low self-esteem compared to African recent immigrants (*OR*: 4.36, 95% *CI*: 1.113-17.078, $p < 0.05$). Implications for social change include providing information to immigration and public health authorities on factors affecting stress and self-esteem of immigrants to promote the best possible integration outcomes.

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Dedication

To my children, Felicia, Jeroy Cassandra, and Adrienne, for tolerating the years of me being “too absorbed in completing my studies” and for enduring my constant joke of being “a permanent student” in the years of attempting to complete my PhD.

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Table of Contents

List of Tables iv

Chapter 1: Introduction to the Study 1

Background of the Study 1

Problem Statement 2

Purpose of the Study 3

Nature of the Study 4

Theoretical Framework 4

Research Questions and Hypotheses 5

Definitions 7

Assumptions 8

Limitations 8

Scope and Delimitations 9

Significance of the Study 9

Summary and Transition 9

Chapter 2: Literature Review 11

Literature Search Strategy 11

Theoretical Foundation 13

Literature Review 16

Summary and Transition 22

Chapter 3: Research Method 24

Research Design and Rationale 24

Methodology 25
Population and Sample Size 25
Sampling and Recruitment Procedures 26
Instrumentation 26
Operationalization of Constructs 28
Data Analysis Plan 29
Research Questions and Hypotheses 30
Threats to Validity 32
Ethical Procedures 33
Summary and Transition 34
Chapter 4: Results 36
Data Collection 36
Descriptive and Demographic Statistics 37
Tests for Normality 38
Research Questions 1and 2 Results 38
Research Question 3 Results 39
Research Question 4 Results 43
Summary and Transition 44
Chapter 5: Discussion, Conclusions, and Recommendations 45
Key Findings 45
Interpretation of the Findings 46
Limitations of the Study 47

Recommendations....48
Social Change Implications....50
Conclusion....51
References....52
Appendix A: Perceived Stress Scale- 10 Item....60
Appendix B: Rosenberg Self-Esteem Scale....62
Appendix C: Demographic and Social Support Network Data....63

List of Tables

Table 1. Variable, Level of Measurement, and Research Questions…….29

Table 2. Research Question, Variables, and Statistical Test……. 32

Table 3. Tests of normality…….38

Table 4. Immigration Status and Stress and Self-Esteem levels……..…39

Table 5. Demographic, Individual, or Ethnic Factors on Stress Scores of Recent Immigrants…..41

Table 6. Demographic, Individual, or Ethnic Factors on Self-Esteem Scores of Recent Immigrants……..…...42

Table 7. Relationship Between Social Support and Stress and Self-Esteem Scores of Recent Immigrants……43

Chapter 1: Introduction to the Study

Psychological distress and low self-esteem includes a number of symptoms that impact an individual's ability to function. These issues may have a historical component depending on the cultural background. This topic has been addressed in a number of countries where the old-fashioned asylum style treatment is obsolete and not person centered to provide optimal outcomes for individuals and their communities (Canadian Mental Health Association, [CAMH], 2010). The purpose of this study was to examine the impact of social support networks on the level of stress and self-esteem of recent (0-5 years) immigrants in Canada. This chapter presents the background, problem statement, nature of the study, current knowledge of the study topic, and social change implications. Immigration, supportive networks, stress, and self-esteem were the variables under study.

Background of the Study

An opportunity for personal growth and economic progress is usually the benefit of immigrating, especially if an individual immigrates to a progressive country like Canada, as indicated by the immigration numbers in this country (Government of Canada, 2013). Immigrating can be seen as a significant survival strategy for those from third world countries that are involved in war or political unrest. For immigrants coming to Canada and attempting to settle, the process of acculturation and the uncertainty of not knowing how to adapt to a new environment may be stressful (Canadian Mental Health Association, [CAMH], 2010).

Immigrants who have postsecondary education may be aware of the difficulties of immigration; facilitation of this process can ease anxiety if the necessary resources are in

place to enable immigrants to identify potential stressors (Williams, Mohammed, Leavell, & Collins, 2010). These resources can be available in the workplace, at places of worship, or in gatherings with those of similar cultural backgrounds. Canada has long been seen as the land of opportunities where the ability to excel is possible and evident in the budding economy (Government of Canada, 2013). For a new immigrant, being part of this growth of technology advancement can be exciting. Canada's immigration numbers indicated that due to over 250,000 new immigrants in the past few years, finding employment may be a problem (Government of Canada, 2013).

Acculturation can affect self-esteem and the perceived feeling of acceptance in a new country (Canadian Mental Health Association, [CAMH], 2010). Acceptance by a new social group serves a protective function as it reduces anxiety (Canadian Mental Health Association, [CAMH], 2010). Panchanadeswaran and Araujo (2011) determined that the relationship between self-esteem and mental health has not been given enough attention and that there are several uninvestigated contributing factors such as immigration that affect self-esteem.

Problem Statement

According to the 2011census (as cited in Robert & Gillian, 2012), the population of immigrants of Canada is at the highest level in the last 75 years. The current immigrant numbers support the fact that Canada is known as the land of opportunity, and the ability to progress is evident in the economy figures, immigration applicants, and vast opportunities that are available. This leads to people from a number of different cultures with different values and lifestyles involved in the process of immigration in one country.

The immigration process may exacerbate a number of physical and mental health symptoms (Sher & Vilens, 2010). More specifically, immigration triggers a number of health-related symptoms, such as high blood pressure and major depression, to the extent that health interventions have to be initiated (Williams et al., 2010). Also, an important characteristic of immigrants' diseases is that "the earlier the onset of illness, the greater severity of disease and poorer survival" (Williams et al., 2010, p. 2).

Having a balance of social and physical activities is the basis for a well-rounded individual and community (Grunge & Collins, 2007). Social activities and scheduled group interactions may be effective in promoting optimal health outcomes. Further, support groups and well-organized resource centers as well as culturally familiar social liaisons may reduce stress and increase supportive circumstances for new immigrants by alleviating mental health issues such as anxiety disorders and depression (Grunge & Collins, 2007).

Purpose of the Study

There is limited research on the health status (especially mental health) among new Canadian immigrants (Zhao, Xue, & Gilkinson, 2010). Also, some of the existing social support networks for immigrants (e.g., religious organizations) are not formally connected to settlement programs (Xu & McDonald, 2010). Researchers have not investigated the impact of a holistic coordination of social support services (Simich, Beiser, Stewart, & Mwakarimba, 2005) as well as the perceived impact of social support on the well-being of immigrants (Grunge & Collins, 2007; Simich et al., 2005).

The purpose of this study was to assess the level of stress and self-esteem of recent and older immigrants in Canada and to investigate the impact of social support networks (provided and perceived) on the promotion of mental well-being among recent immigrants. The dependent variables were the level of stress and self-esteem, and the independent variables were demographic and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada, as well as the existence and use of support networks.

Nature of the Study

I conducted a cross-sectional quantitative study. The dependent variables were level of stress and self-esteem, and the independent variables were demographic, individual, and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada, as well as the existence and use of support networks. A convenience sample of 400 immigrants was needed for statistical power (>0.80%). Participants were recruited from three community-based spiritual facilities (e.g., churches) and two community-based local facilities. Data were obtained by the use of surveys, which included mostly closed but also some open-ended questions.

Theoretical Framework

The cultural care framework by Srivastava (2006), which was first described by Leinger (1991), a nursing theorist, was used for this study. This framework includes subjective and objective values and beliefs systems for an individual or group to improve their well-being. Incorporating the aspect of culture in all areas of personal health is necessary for a healthy way of living (Srivastava, 2006); when health care providers

understand the cultural complexities and influences on the health of their clients, quality of health care may be improved (Srivastava, 2006). Seyele's (1976) general adaptation theory was also be used in the study. According to this theory, chronic stress is a major cause of illness. When effective coping strategies are not adopted, this may cause a number of physical symptoms (Smeltzer & Bare, 2006). Stress sometimes occurs as a result of a change in the environment (immigration) and depends on the nature of the stressor (Smeltzer & Bare, 2006).

Research Questions and Hypotheses

1. What is the relationship between recency of immigration and level of stress among immigrants in Canada?

$H_0$1: There is no significant relationship between immigration within the past 5 years (recent immigrants) and level of stress among immigrants in Canada, compared to nonrecent immigrants.

H_a1: There is a significant relationship between immigration within the past 5 years (recent immigrants) and level of stress among immigrants in Canada, compared to nonrecent immigrants.

2. What is the relationship between recency of immigration and level of self-esteem among immigrants in Canada?

$H_0$2: There is no significant relationship between immigration within the past 5 years and level of self-esteem among immigrants in Canada, compared to nonrecent immigrants.

H_a2: There is a significant relationship between immigration within the past 5 years and level of self-esteem among immigrants in Canada, compared to nonrecent immigrants.

3. Do demographic, individual, or ethnic factors have an impact on the level of stress and self-esteem of new immigrants in Canada?

$H_{01}3$: Demographic, individual, or ethnic factors do not have an impact on the levels of stress of new immigrants in Canada.

$H_{02}3$: Demographic, individual, or ethnic factors do not have an impact on the levels of self-esteem of new immigrants in Canada.

$H_{a1}3$: Demographic, individual, or ethnic factors have an impact on the levels of stress of new immigrants in Canada.

$H_{a2}3$: Demographic, individual, or ethnic factors have an impact on the levels of self-esteem of new immigrants in Canada.

4. Do provided and perceived social support networks have an impact on the levels of stress and self-esteem of recent immigrants in Canada?

$H_{01}4$: Provided and perceived social support networks do not have an impact on the levels of stress of recent immigrants in Canada.

$H_{02}4$: Provided and perceived social support networks do not have an impact on the levels of self-esteem of recent immigrants in Canada.

$H_{a1}4$: Provided and perceived social support networks have an impact on the levels of stress of recent immigrants in Canada.

$H_{a2}4$: Provided and perceived social support networks have an impact on the levels of self-esteem of recent immigrants in Canada.

The dependent variables were the level of stress and self-esteem, and the independent variables were demographic, individual, and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada, as well as the existence and use of support networks.

Definitions

Terms used in the study included the following:

Cultural care: The ability to interact with people of different cultures and socioeconomic status when providing health care (Srivastava, 2006).

Ethnic background: Cultural beliefs related to place of birth/upbringing. This may be used interchangeably with *cultural background*.

Foreign postsecondary education/credentials: Training of immigrants or formalized education training from countries of birthplace that is other than the country of immigration (Reitz, 2011).

Perceived social support: Any support that an individual (in this study an immigrant) feels that he or she can have from friends, religious organizations, settlement programs, etc. to help integration into the new environment.

Perceived stress: The degree to which situations in life are appraised as stressful (Cohen, Kamarck, & Mermelstein, 1983).

Self-esteem: A favorable or unfavorable attitude toward the self (Rosenberg, 1965).

Assumptions

I assumed that the use of social support networks was beneficial in promoting optimal mental health outcomes for new immigrants. I also assumed that social support was necessary for well-being (Beattie, S., Lebel, S., & Tay, J., 2013; Simich et al., 2005). Mental health can be related to genetic/environmental or situation occurrences (Matthews, T., Danese, A., Wertz, J., Odgers, C. L., Ambler, A., Moffitt, T. E., & Arseneault, L., 2016; Smeltzer & Bare, 2006). Looking at social support in finer detail in terms of religious/ethnical values/beliefs and the implications of these supports in maintaining a balanced life is also an assumption of this study.

Limitations

Because of the cross-sectional design, one limitation was that exposure and disease were studied simultaneously; therefore, it may have been difficult to determine the direction of the association (Levin, 2006). To address this limitation, I presented the results as associations only. Also, I conducted appropriate statistical analyses to address this limitation, and no causal relationships were inferred from the findings.

Another limitation was that the participants may not have understood the questionnaire and may have been subject to recall bias. To address these limitations, the content and construct validity of the survey were confirmed as much as possible. In addition, it is not possible to generalize findings beyond Canada due to different social support networks and cultural backgrounds. Finally, given the convenience sample used in this study, findings may not be generalizable to all recent immigrants in Canada.

Scope and Delimitations

The aim of this study was to assess the level of stress and self-esteem of new immigrants in Canada and to investigate the impact of social support networks (provided and perceived) on the promotion of mental well-being among new immigrants. Populations involved included people from more than 50 nations who attend various religious/community institutions throughout Toronto. Delimitations were immigrants at least 18 years old who spoke and read English fluently.

Significance of the Study

The significance of my study was the assessment of relatively unexplored mental health issues for new immigrants in Toronto, including level of stress and self-esteem in relation to provided and perceived social support networks. Identifying mental health issues in new immigrants may help to enlist specific measures to reduce or treat these potential health concerns. Findings may promote positive social change by providing useful information on the mental health status of new immigrants in relation to the provided social support networks; therefore, specific measures may be taken to improve the well-being of this high-risk population.

Summary and Transition

The purpose of this study was to assess the level of stress and self-esteem of new immigrants in Canada and to investigate the impact of social supports networks (provided and perceived) on the promotion of mental well-being among new immigrants. The dependent variables were the level of stress and self-esteem, and the independent variables were demographic, individual, and ethnic factors of new immigrants who

recently (0 to 5 years) came to Canada, as well as the existence and use of support networks. The nature of the study was a cross-sectional quantitative approach. Srivastava's cultural theory and Seyele's general adaptation theory provided the framework for this study.

I excluded immigrants who did not understand English fluently and were not adults. Results cannot be generalized to immigrants who came to countries besides Canada, due to different social support networks and cultural backgrounds. In Chapter 2, I present a detailed literature review on the topic including relevant variables and risk factors.

Chapter 2: Literature Review

The purpose of the study was to assess the level of stress and self-esteem of recent immigrants in Toronto, Canada, and to investigate the impact of social support networks on the promotion of mental well-being among new immigrants. Immigration has become the backbone of Canada, which includes a mix of people with a variety of skill sets, education levels, and socioeconomic backgrounds. Previous research regarding health-related circumstances that surround the immigration process has indicated that social support is necessary to ensure optimal mental and physical health outcomes (Nauert, 2008; Simich et al., 2005). However, there is limited research on faith-based, culturally similar support groups that can provide and facilitate the settlement process, along with possible health benefits such as decreasing anxiety and stress levels. Individuals with psychological distress and low self-esteem have been consideres disadvantaged and socially excluded groups in society (Keating, 2007). These issues in combination with new environments can be problematic. In this chapter, I describe the literature search strategy, theoretical foundation, and key variables of the study.

Literature Search Strategy

I reviewed literature from 1986 to 2016 using the Walden Library, Google Scholar, Google, the Centre for Addiction and Mental Health (CAMH) website, the Canadian Mental Health Association (CMHA) website, and PubMed. The terms used were *social support and mental health*, *social networks for immigrants*, *immigration*, *mental health*, *self-esteem* and *immigration*, *immigration* and *stress*, *religion*, *Canada*, *mental health of immigrants*, and *new immigrants.* The scope of the literature review

indicated the surge of mental health concerns including current information regarding this illness and the importance of recognizing mental illness in the public arena to decrease the stigma associated with it. Morgan and Fearon (2007) argued that there is a consistent finding of high incidence of schizophrenia in migrant and ethnic groups. The Canadian population is considered Eurocentric because in the late 1800s the immigration influx was mostly from Great Britain and the United States (CAMH, 2009; Government of Canada, 2011). However, in recent last years this situation has changed because this labor force was not sufficient for Canada's needs; therefore, other countries were encouraged to aid in Canada's advancement, resulting in changes in immigration trends (CAMH, 2009; Government of Canada, 2011).

There is a possible mental health advantage if social integration plays a role, according to the CMHA (2011). Health care professionals need to understand these factors to enlist the support of the proper resources to facilitate integration.

CMHA (2011) described the diversity of communities and how social services need to address the needs of each of those communities. Other literature written for the CMHA by researchers in the field of psychiatry support the importance of social services such as social workers and occupational therapists who are experienced in the area of mental health (CMHA, 2011; CAMH, 2009).

Factors that exacerbate mental health symptoms include stress and the manner in which individuals react to stress-related events such as immigration (Macionis & Gerber, 2010). Seyele's (1976) theory provided the framework to examine stress and its impact on the mental health of Canadian immigrants.

Theoretical Foundation

According to the cultural care framework, subjective and objective values and belief systems are necessary for individuals to improve their overall well-being (Keating, 2007; Leinger, 1991; Srivastava, 2006). Individuals have to understand their differences and sometimes embrace situations and concepts that may not familiar to them, particularly if they are employed in an occupation that serves the public. The connection of culture and mental illness is relevant in Canada due to the large multicultural population and the variations in cultural perception on mental health issues (Xu & Macdonald, 2010).

The cultural framework that demonstrates efficacy of resources for mental health has to be adapted according to cultural values and beliefs to promote beneficial outcomes for communities.

Seyele's general adaptation theory proposes that major stress is a cause of illness if effective coping mechanisms are not implemented (Macionis & Gerber, 2010). Understanding the cycle of stress and the physical effects on the body, which ultimately affect the mental well-being of an individual, includes strategies to decrease the stress precipitators. Every situation can be viewed as stressful or nonstressful and is contingent on how the individual perceives it, their response to the stressor, and the resources available (Macionis & Gerber, 2010). According to general adaptation theory, when stress is used as a motivator it can produce positive effects (Smeltzer & Bare, 2004). Seyele discussed the stress response as the body's reaction to any demand (Smeltzer & Bare, 2004). Immigration can be viewed as a demand due to the psychological aspect of

leaving what is familiar to an individual or family, such as environment or cultural norms (Sher &Vilens, 2010; Zhao et al., 2010).

General adaptation theory has been applied in ways similar to the current study including adaption of concepts such as transcultural nursing and cultural competence; these concepts are used to educate health professionals on how to care for individuals according to their cultural preferences (Srivastava, 2006). Life events such as a change in family status or situation, such as new baby, career change, marriage, migration, are managed effectively according to cultural beliefs and values.

The relationship between general adaptation theory and the research questions is that immigration is a stressful process; understanding cultural values and beliefs systems is vital in facilitating a smooth immigration process. Also, the way people handle stress effects their self-esteem; if they do not have resources or strategies in place, this affects how they feel about themselves, whether they are meeting their life goals, and their peer and family expectations.

Dalgard and Thapa (2007) concluded that when individuals have strong loyalties to their families, traditions, and cultural values, it can be problematic when a family migrates to a host country. Understanding people's values and loyalties is a step toward providing measures that can facilitate the stress related to immigration.

The body of research that supports this study originates from the multicultural ideology of an ethnic subculture (Keating, 2007). The process of settlement in the host country as a new immigrant is an "immigrant's dream" and is perceived as a potentially successful event (Xu & Macdonald, 2010). Dalgard and Thapa (2007) investigated the

link between social integration and psychological distress and found that there was a positive association between mental health outcomes when social integration is incorporated into a new immigrant's lifestyle. Immigrants' experiences with social resources have an impact on their emotional and mental well-being (Keating, 2007). The historical and contemporary positions of immigrants and their culture are determinants of their successful integration into the host country (Keating, 2007). Immigrants who are part of the settlement process will have various situations that may present as stressful or nonstressful; successful transition through these situations may be more effective if familiar supports and resources are in place for these individuals and communities (Panchanadeswaran & Araujo, 2011).

The connection with the key elements of the framework is the cultural component of immigration and the ability to acknowledge the strategies that have to be maintained or implemented. These strategies ensure that there is not just a physically healthy population, but also a mentally well population.

Stress can be beneficial depending on whether a successful settlement is achieved; if this type of stress is present, it may be a motivating factor in an immigrant's lifestyle. Self-care is personalized according to a person's upbringing, cultural background, and environmental factors (Srivastava, 2006). How people care for themselves and what they value is determined by these factors. Once immigration is ingrained in the mind-set of those ready to migrate, successful integration in the new country will determine whether their levels of self-esteem will decrease or increase. A decrease in self-esteem may occur

if a person feels devalued in the new country and may lead to physical symptoms that in turn may affect mental health.

The cultural care framework in this study was used to examine self-esteem, stress levels, and their effect on various ethnic groups that migrate to Canada and the benefits of social supports. Morgan and Fearon (2007) argued that social experience is important and can increase or decrease stress-related symptoms and can influence the development of mental illness. How the framework relates to the study approach and the key research questions is that although the measurement of feelings and symptomologies has been described in qualitative studies on the lived experiences of individuals, the measurement of these symptomologies in a large sample will yield generalizable findings. This measurement may indicate the reality of decreased self-esteem, anxiety, evidence of stress, and stress-related symptoms.

Literature Review

Several factors have been found to affect self-esteem and stress levels, and thereby mental well-being of immigrants. Xu and MacDonald (2010) noted that immigrants' mental health can be assessed using indicators such as stress, depression, alcoholism, and thoughts of suicide. Other researchers have approached the problem by indicating that mental health issues are increasing especially in the immigrant population (Dalgard &Thapa, 2007; Madianos, 2012). The fact that Canada is a multicultural nation that requires advanced skill sets and prerequisites for postsecondary education may also increase immigrants' stress levels (CIC, 2011]. Further, mental health concerns have become a prominent health promotion advertising strategy in Toronto to increase public

awareness regarding mental health, especially as far as immigrants are concerned (CIC, 2011).

High stress levels are often assessed by physical signs such as increased blood pressure, anxiety exhibited by sweating, tremulousness, and heart palpitations (Austin & Boyd, 2012; Smeltzer & Bare, 2006). The feelings of anxiety may be related to the job search process, to not being successful new employment positions, and to the possibility of letting down family members in their new country and their native home (Austin & Boyd, 2012).

Stress levels of immigrants can be assessed with the use of a variety of instruments. The most common stress scales used in the literature are Cohen's Perceived Stress Scale (PSS), the Daily Hassles Test, and the Holmes-Rahe Scale. The PSS (4-, 10-, and 14-item versions) was designed to assess perceived stress of persons with at least junior high school education (Cohen et al. 1983; Cohen & Williamson, 1988). The major advantages of this scale are that its questions are written in a simple language with general content that is easy to understand, and the response alternatives are simple to grasp (Conser, 2008). Therefore, this scale was suitable for recent immigrants (0 to 5 years in a new country) who usually have difficulties in understanding the language of their new country. Also, this scale has been used and validated in several languages such as English, Arabic, Chinese, and Spanish. The 4-item version demonstrates moderate internal validity ($r = 0.60$), but the 10- and 14-item versions are adequately valid ($r = 0.85$) (Conser, 2008).

High stress levels are often assessed with the use of Holmes-Rahe Life Stress Inventory, which is a 43-item scale (Holmes & Rahe, 1967). Each item represents a life stressful event that happened during the previous year, and a total score of stress is calculated. Although it is a very detailed scale, the high number of items and the specificity of questions make this scale not suitable for immigrants. To the best of my knowledge, there is no available information on the reliability of this scale.

Everyday stressors can be evaluated with the Daily Hassles Test (Kanner, Coyne, Schaefer, & Lazarus, 1981). This test has 117 items to assess sources of stress during the last month. Although this scale records a great variety of stressors and has been widely used in several studies, the format of the questions only permits the assessment of events that are relatively severe. For this reason, a revised version was applied to separate the reported occurrence of a hassle from a person's appraisal of its severity (Holm &Holroyd, 1992). Nevertheless, the remaining high number of items and the relatively complexity of questions prevented the application of this scale in this study. Also, this scale demonstrated moderate reliability (r=0.64) (Jones, 2006).

Regarding the assessment of self-esteem levels of immigrants, Rosenberg Self-Esteem (Rosenberg, 1965) and Coopersmith (Coopersmith, 1967) scales can be applied. The Rosenberg Self-Esteem Test is a 10-item Likert scale, and it was originally applied to 5,024 high school juniors and seniors; therefore, the questions are very simple and easy to understand. The test's simplicity, brevity and high reliability (r=0.90) made it ideal for use in a study of immigrants.

On the other hand, Coopersmith scale is a 50 item test designed to assess self-esteem of children and adults (Coopersmith, 1967). The main advantage of this scale is that it has very simple binary responses ("Like me", "Unlike me") and thus can be easily used in a variety of populations. Also, it was found to have adequate internal validity (r=0.72-0.85) (Chiu, 1985). However, the relatively large amount of questions incommodes its implementation.

The role of demographics is evident particularly if there is a supportive network of similar ethnic backgrounds or spiritual beliefs. This will offer potential networking and liaison opportunities (Texieria, 2007). Building on resources already available in these areas populated by similar ethnic families creates small immigrant communities in many countries are called names such as Chinatown, Little Portugal and Little Jamaica (Teixeira, 2007). This occurs in many urban areas in Canada, as well as the US and England, it demonstrates the value and necessity of ethnic social supports.

Age is significant determinant as younger adults are more prone to adapt quicker to the immigration process due to involvement in post secondary education and other extracurricular or social activities, thus greater exposure to other cultures and diverse background (Statistics Canada, 2011; Bhugra & Jones, 2001). Older adults that immigrate with work experience, skill sets and professional designations will have to undergo extensive evaluations of their credentials and work experience, some to find that their credentials are not worth the piece of paper that they are written on [Government of Canada (GOC), 2011]. These situations may lead to feelings of decreased self worth, not

being able to have the career they thought they would have, and the cost of upgrading to their current designation in Canadian standards (GOC, 2011).

There are a number of social support networks available for new immigrants that offer services such as assessment classes, finding a place to live, employment and mentoring services within their communities (GOC, 2013). These agencies are beneficial but lack the supportive element groups with similar beliefs and backgrounds which can be provided by churches, local community organizations and places of worship (CAMH, 2011). The main disadvantage of government agencies and local agencies is that are currently in place is that they are short lived and often close down after a few months in operation (GOC, 2013). The Ministry of Citizenship and Immigration of Canada had started an initiative to improve service coordination for new immigrants but that expired in 2011, and no other service has been implemented since then (Citizenship and Immigration Canada, 2009). Mental health agencies should account for mental health symptomology experienced by various cultures/races to obtain a generalized understanding of how race is related to mental health issues (GOC, 2013). Services can be evaluated to determine their efficacy for the communities their serve, by establishing community cohesiveness, connections, religious beliefs and the necessity of these to decrease susceptibility to develop effective coping mechanisms throughout the immigration process.

The length of time that an immigrant has resided in Canada usually shows evidence of a certain level of socioeconomic hierarchy attainment. Employment is reflective of education and skill sets. It represents the type of housing you can afford, the

car you drive and ultimately living the Canadian dream (Ibbitison, 2011). This demonstration of achievement is expected in out 5-7 years (Ibbitison, 2011). Feelings of decreased self-worth and self-esteem may be experienced especially if one compares themself to another recent immigrant who has been successful in their endeavors (Ibbitison, 2011). Further analysis of the successful migrant can be contributed to the healthy immigrant effect which presents as decline in an immigrants health state, as their length of residence in Canada increases (Gushula, Pottie, Hatcher, Roberts, &DesMeule, 2011). There is a stringent screening process when emigrating to Canada and this attributes to the overall health status of new immigrants (Gushula, Pottie, Hatcher, Roberts, & DesMeule, 2011). However this process clearly does not account for mental health symptoms that may occur later exacerbated by the immigration process, and most likely subtle symptoms of mental illness that may not be detected during the initial medical screening process (Gushula, Pottie, Hatcher, Roberts, & DesMeule, 2011; Madianois, 2012).

Many researchers question if our society is balanced in knowing the positive and negative effects of acculturation into the Canadian society (Xu & MacDonald, 2010; Morgan &Fearon 2007). Olson (2010) indicates the need to develop culturally sensitive materials for the different cultural and diverse communities; this in consultation with community leaders who can share the needs of their population. Places of worship and churches, community centers may be ideal portals as this is where many new immigrants congregate as a place of solace, refuge and socialization from the vigor’s of daily life expectancies.

Immigration is what Canada is known for, which provided the ability for individuals and families to progress economically and achieve a comfortable standard of living (Ibbitison, 2011). Understanding the importance of mental health as well as physical health is the new normal because mental and physical health go hand in hand (Smeltzer& Bare, 2004). Assuring that our communities have optimal mental health wellness is vital for successful communities. The strengths in this approach indicate the need for researchers to further investigate and evaluate resources for new immigrants. Increasing the avenues for accessible resources for new immigrants that are sustainable and become a cornerstone of their communities is paramount. CAMH (2009) indicated that the component of stress and self-esteem can be measured by our socioeconomic backgrounds, the jobs we hold and our culture values. The pressure that may be experienced when one immigrates includes the need to be successful and to provide to its family at home and abroad as many benefits as possible (Ibbitison, 2011).

Rationale for the selection of these variables allows for the measurement of demographics, stress levels, and self esteem in immigrants who have immigrated to Canada within the past 5 years. This will determine if social supports within cultural community organizations; places of worship and gatherings would be beneficial in supporting their needs, in collaboration with leaders that understand the communities they serve.

Summary and Transition

Identification of concerns of mental health issues in the literature reflects the benefits of social supports in being essential in improving the mental well-being of

individuals involved in these resources. Addressing the gaps in knowledge will determine the extent that immigrants are said to consume a large amount of health care services. One in five immigrants in Canada is from a visible minority group and ultimately the health care system is going to be “burdened” by this population. The aim of the existing stringent medical screening process is to rule out the threat of infectious diseases that may be imported by migrants, but no special focus on the self-esteem and stress issues due to immigration is given. Social supports are necessary in promoting and providing a supportive benefit in improving the effects of psychological and physiological stress. Future exploration in determining the efficacy of social supports that are culturally, socially, and ethnically familiar with immigrants, might offer potential benefits in this area. For this purpose, the methodology, the instruments and the sampling strategy will be provided in chapter 3.

Chapter 3: Research Method

The purpose of the study was to assess the level of stress and self-esteem of recent immigrants in Toronto, Canada, and to investigate the impact of social support networks on the promotion of mental well-being among new immigrants. Specific and validated questionnaires were used in a convenience sample of new immigrants (0 to 5 years) in Toronto. Potential associations among stress, self-esteem, and demographics as well as social support networks were examined. This chapter includes the research rationale, sampling strategy, recruitment process, measurement instruments, and data analysis plan.

Research Design and Rationale

I conducted a quantitative cross-sectional study to assess the levels of stress and self-esteem of new immigrants. I distributed existing instruments with established psychometric properties, namely Cohen's Perceived Stress Scale (PSS) (Cohen et al. 1983; Cohen & Williamson, 1988) and the Rosenberg Self-Esteem Test (Rosenberg, 1965) to a convenience sample of new immigrants in Toronto, Canada. The dependent variables were the level of stress and self-esteem, and the independent variables were demographic, individual, and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada, as well as the existence and use of support networks. Specific questionnaires were the most appropriate data collection method as they were relatively easy and low cost, and they enabled me to reach a large population and have rapid turnaround of data collection (Creswell, 2009). Also, they enabled me to compare my findings to other studies in which the same surveys were applied.

Methodology

Population and Sample Size

The main target population in this study was immigrants who recently immigrated (0 to 5 years) in Toronto, Canada, and came from various ethnic and cultural backgrounds. When the population under study (in this case foreign-born people who arrived in Canada within 5 years) is approximately known, the needed sample size can be estimated using four components: margin of error, confidence interval, response distribution, and population size (Frankfort-Nachmias & Nachmias, 2008). I applied the following formula:

$$x = Z(c/100)2r(100-r)$$

$$n \text{ (sample size)} = N\,x/((N-1)E2 + x)$$

$$E \text{ (margin of error)} = \mathrm{Sqrt}[(N - n)x/n(N-1)]$$

N was the population size, *r* was the fraction of responses, and *Z*(c/100) was the critical value for the confidence level *c* (Raosoft, 2004).

The required sample size was determined by using a margin of error of 6%, a confidence interval of 95%, a response distribution of 50% , and a population size of 227,000 adult foreign-born people who arrived in Canada within 5 years period (2001-2006) and settled in the city of Toronto according to the census (Statistics Canada, 2009). The estimated sample size needed for this study was 300. To perform the best possible comparison of stress and self-esteem levels among recent and nonrecent immigrants (RQ1 and RQ2), I attempted to recruit an equal number of nonrecent immigrants.

Sampling and Recruitment Procedures

I used a convenience sample to assess the impact of the use of social supports and demographic variables on stress and self-esteem levels of new immigrants. A convenience sample allowed for easy accessibility of potential participants, but I could not account for an even representation of the various populations that make up Toronto.

A design of a similar nature was detailed in a study conducted by Babgley, Bolithal and Betrand (1997). My participants were mostly recruited from three community-based spiritual facilities (e.g., churches) and two local community-based facilities. Inclusion criteria were recent immigration status (0 to 5 years), age (18 years and above), and fluency in English speaking and reading.

After obtaining letters of cooperation from the aforementioned facilities and Walden's IRB approval, I solicited participation with the use of flyers, posters, and social media. After obtaining written informed consent from each participant, I distributed the anonymous surveys to the immigrants who agreed to participate in the study and who also met the inclusion criteria. I collected the completed surveys and responded to any concern of the participants.

Instrumentation

The surveys used in this study included the 10-item version of the Perceived Stress Scale (PSS) (Cohen, et al. 1983; Cohen & Williamson, 1988) to assess the stress levels of immigrants during the last month. For each question, a 5-level Likert-scale response was provided (0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often) as shown in Appendix A. PSS-10 scores were obtained by reversing the

scores on the four positive items (e.g., 0 = 4, 1 = 3, 2 = 2, etc.) and then summing across all 10 items. Items 4, 5, 7, and 8 were the positively stated items. The major advantages of this scale were that its questions were written in a simple language with general content that was easy to understand (Conser, 2008). Also, this scale had been used and validated in several languages such as English, Arabic, Chinese, and Spanish, and the 10-item version was adequate reliable and valid (r = 0.85) (Conser, 2008). Another advantage was there is no need for permission to use this survey when it is used for academic research or educational purposes (Carnegie Mellon University, n.d.).

I also used the Rosenberg Self-Esteem Test, which is a 10-item Likert scale survey that was originally applied to 5, 024 high school juniors and seniors; therefore, the questions are very simple and easy to understand (Rosenberg, 1965). The test's simplicity and brevity made it ideal for use in new immigrants. For each item there are four responses: 3 = strongly agree, 2 = agree, 1 = disagree, 0 = strongly disagree, as shown in Appendix B. The total score of all 10 items was calculated by summing across all 10 items. Items 2, 5, 6, 8, and 9 were reversed, that is 0 = strongly agree, 1 = agree, 2 = disagree, 3 = strongly disagree. Also, there is no need for permission to use this survey when it is used for academic research or educational purposes (The Morris Rosenberg Foundation, n.d.).

Demographic data were also collected, such as age, gender, ethnicity, race, country of origin, years in Canada, and educational level, as shown in Appendix C. Further, I recorded the potential use of social support networks that are available for new

immigrants and offer services such as assessment classes, finding a place to live, employment counseling, and mentoring services within communities (GOC, 2013).

Operationalization of Constructs

The independent variables included demographic data and existence/use of social support networks. The level of measurement for these variables was mostly nominal. The dependent variables were levels of stress and self-esteem as measured by the aforementioned scales. The level of measurement for these variables was continuous, as shown in Table 1.

Table 1

Variable, Level of Measurement, and Research Question

Variable	Level of Measurement	*Research Question(s)*
Level of stress (DV)	Continuous	*All RQs*
Level of self-esteem (DV)	Continuous	
Immigration status (IV)	Nominal/Binary	*RQ1: What is the relationship between immigration within the p and level of stress among immigrants to Canada?* *RQ2: What is the relationship between immigration within the past 5 years and level of self esteem among immigrants to Canada?*
Age: years (IV)	*Continuous/ordinal*	*RQ3: Do demographic, individual or ethnic factors have an impact on the level of stress and self-esteem of recent immigrants in Canada?*
Gender: male/female (IV)	*Nominal/Binary*	
Race (IV)	*Nominal*	
Ethnicity (IV)	*Nominal*	
Country of origin (IV)	*Nominal*	
Years in Canada (IV)	*Continuous*	
Educational level (IV)	*Ordinal*	
Use of social support networks (IV)	*Nominal/Binary*	*RQ4: Do provided and perceived social support networks have an impact on the levels of stress and self-esteem of recent immigrants in Canada?*

Data Analysis Plan

The dependent variables were level of stress and self-esteem and the independent variables were demographic, individual, and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada.

First data were presented as descriptive statistics (means/medians and estimates of spread, e.g., standard deviation, for continuous variables and frequencies for categorical variables). Then, I examined the relationship between independent and dependent variables for RQ1, RQ2, and RQ4 using the Student's *t* test (if data were normally distributed) or the Mann-Whitney U test. Finally, I conducted multivariate analysis to test

the impact of demographic, individual, or ethnic factors on the level of stress and self-esteem of new immigrants in Canada. Linear regression was the first choice if assumptions of the dependent variable were met, such as normality, homoscedasticity, etc. Otherwise, I recoded the dependent variable into a binary ordinal variable (high level/low level) and used binary logistic regression. All data were imported and analyzed using IBM SPSS software with an alpha level of 0.05 for statistical significance.

Research Questions and Hypotheses

1. What is the relationship between recency of immigration and level of stress among immigrants in Canada?

$H_0$1: There is no significant relationship between immigration within the past 5 years (recent immigrants) and level of stress among immigrants in Canada, compared to nonrecent immigrants.

H_a1: There is a significant relationship between immigration within the past 5 years (recent immigrants) and level of stress among immigrants in Canada, compared to nonrecent immigrants.

2. What is the relationship between recency of immigration and level of self-esteem among immigrants in Canada?

$H_0$2: There is no significant relationship between immigration within the past 5 years and level of self-esteem among immigrants in Canada, compared to nonrecent immigrants.

H_a2: There is a significant relationship between immigration within the past 5 years and level of self-esteem among immigrants in Canada, compared to nonrecent immigrants.

3. Do demographic, individual, or ethnic factors have an impact on the level of stress and self-esteem of new immigrants in Canada?

$H_{01}3$: Demographic, individual, or ethnic factors do not have an impact on the levels of stress of new immigrants in Canada.

$H_{02}3$: Demographic, individual, or ethnic factors do not have an impact on the levels of self-esteem of new immigrants in Canada.

$H_{a1}3$: Demographic, individual, or ethnic factors have an impact on the levels of stress of new immigrants in Canada.

$H_{a2}3$: Demographic, individual, or ethnic factors have an impact on the levels of self-esteem of new immigrants in Canada.

4. Do provided and perceived social support networks have an impact on the levels of stress and self-esteem of recent immigrants in Canada?

$H_{01}4$: Provided and perceived social support networks do not have an impact on the levels of stress of recent immigrants in Canada.

$H_{02}4$: Provided and perceived social support networks do not have an impact on the levels of self-esteem of recent immigrants in Canada.

$H_{a1}4$: Provided and perceived social support networks have an impact on the levels of stress of recent immigrants in Canada.

$H_{a2}4$: Provided and perceived social support networks have an impact on the levels of self-esteem of recent immigrants in Canada.

The dependent variables were level of stress and self-esteem and the independent variables were demographic, individual, and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada, as well as the existence and use of support networks. Table 2 shows the statistical tests used for each variable.

Table 2

Research Questions, Variables, and Statistical Tests

Research question	Variables	*Statistical tests*
RQ1, RQ2	Immigration status (IV), Level of stress and self-esteem (DV)	*t test or Mann-Whitney U*
RQ3	Age: years (IV) Gender: male/female (IV) Race (IV) Ethnicity (IV) Educational level (IV) Level of stress and self-esteem (DV)	*Linear or binary logistic regression*
RQ4	Use of social support networks (IV) Level of stress and self-esteem (DV)	*t test or Mann-Whitney U*

Threats to Validity

Potential threats to internal validity included the higher percentage of women in the sample. Traditionally women are more engaged in activities and programs to acquire a sense of inclusion and fulfillment for their families, compared to men (Macionis &

Gerber, 2010). To address this threat, I tried to recruit an equal number of males and females.

Further, as discussed earlier, the participants were mostly recruited from three community based spiritual facilities (e.g., churches) and two local community based facilities. This may result in a potential bias in interpreting the results between members of the same family. To avoid this as much as possible, a control variable was added in the RQ3 regression model, “place of recruitment”, for example church group 1, etc. (please see Appendix C, item #9).

Also, causal inferences should be made with caution, due to the cross-sectional design of this study (Creswell, 2009).However, this internal validity threat could be addressed with the use of the appropriate bivariate and multivariate statistical analyses.

As the study sample was recent immigrants living in the city of Toronto, the obtained results will not be generalizable to other populations of immigrants (external validity threat). Nevertheless, the findings of this study may be useful for this specific high risk population group.

Finally, validity for measurement (content, construct and empirical) were confirmed, as both surveys which were used in this study are well known and published instruments, for which validity and reliability have been already investigated in previous studies (Conser, 2008; Rosenberg, 1965).

Ethical Procedures

Once approval from Walden’s Institutional Review Board (IRB) (# 02-19-16-0121733) was obtained the described steps took place: Ensuring that communication with

the administrators of the facilities was understood regarding the nature of the study so that they were aware of the content of the research, reinforcing what it can do to optimize the functioning of their facility members. Inform potential participants of the upcoming survey in the media component each facility uses to reach their members. The survey was passed out in the various meetings or congregational activities that occur in each facility. The completed survey was placed in a sealed box in a dedicated area within each facility and will be kept in the administrator's office in a locked cabinet. Surveys were placed in an open box for those participants that did not received one or spoilt their survey.

The participants had knowledge about the nature of the study and an informed consent was provided prior to completing the survey. Privacy, dignity and confidentiality in all aspects of were reinforced and maintained throughout. I ensured that there is no risk involved by obtaining proper consent. Informing participants that the study was voluntary, there was no monetary gain, and they may withdraw at any time. There was a period of up to three weeks after the initial distribution that the survey was available for. After data collection and analysis was finalized, the surveys were shredded. After completion of the study a short summary of the findings will be disseminated in each facilities media communication, to inform members and participants of the results.

Summary and Transition

The aim of this cross sectional study was to assess the levels of stress and self-esteem of new immigrants in Canada and to explore the impact of several demographic, ethnic and individual factors on these levels. Already used instruments, Sheldon Cohen's Perceived Stress Scale (PSS) and Rosenberg Self-Esteem test were distributed to a

convenience sample of new immigrants in Toronto, Canada. The dependent variables were the level of stress and self-esteem, and the independent variables were demographic, individual and ethnic factors of new immigrants who recently (0 to 5 years) came to Canada, as well as the existence and use of support networks. Appropriate bivariate and multivariate analysis were conducted to analyze the obtained data. Threats to validity were addressed by using existing validated and well established survey instruments, as well as by the use of the suitable statistical tests. The results will be presented and analyzed in Chapter 4.

Chapter 4: Results

The purpose of this study was to assess the level of stress and self-esteem of immigrants in Canada and to investigate the impact of social supports networks (provided and perceived) on the promotion of mental well-being among new immigrants. In this chapter the results of the data analysis for each research question are reported.

The instruments that were used were Cohen's Perceived Stress Scale (PSS) (Cohen et al., 1983; Cohen & Williamson, 1988) and the Rosenberg Self-Esteem Test (Rosenberg, 1965). The survey included additional demographic questions to identify the ethnic/cultural characteristics of participants who completed the survey. The survey was accessible through a Facebook account, and online participants could access the survey through those media outlets. The poster was included on the Global Kingdom Ministries (GKM) website, in various local grocery stores, and in community centers in the Toronto area. I posted flyers on community media outlets/bulletin boards after approval from community leaders of the GKM, managers, and supervisors at the local grocery chains and community centers in Toronto.

I conducted a quantitative cross-sectional study; the dependent variables were the level of stress and self-esteem, and the independent variables were demographic, individual, and ethnic factors of immigrants who came to Canada, as well as the existence and use of support networks.

Data Collection

The sample was selected from the greater Toronto region of Canada. I distributed pamphlets in Scarborough, Etobicoke, Mississauga, and the Durham region of Toronto.

The population of Toronto consists of 612,9934 million people (Government of Canada, 2016). The population of Durham is estimated to be 608,125 (Government of Canada, 2016). The timeframe for data collection was March 2016 to August 2016. The total number of respondents was 400. The survey was closed on September 1, 2016.

After the online collection of responses, I imported data into SPSS. The survey results indicated that 126 of the respondents were from the local community grocery stores, 237 were from local places of worship (GKM), and the remaining 37 were from 10 doctors' offices and clinics throughout the Durham community.

Descriptive and Demographic Statistics

The final sample consisted of 400 participants (47.3% males and 52.7% females). The average age of the participants was 42.8 years (*SD* = 15.8). Regarding the immigration status, 55.3% were recent immigrants (0-5 years) and 44.7% were nonrecent immigrants. The results by race indicated that participants were mostly Black (31.8%) or White (24.5%) followed by Asian participants (16.3%). Also, 13.8% of the sample identified themselves as having Hispanic ethnic background, 12.3% as European, 11.8% Afro Caribbean, and 9.5% African. The remaining ethnicities included 5.5% South Asian and 7.3% East Asian.

The education level of the participants was the following: 71.8% of participants were college graduates or higher and 27.5% had some college education. Only 1% was of lower educational background (9^{th} to 12^{th} grade). Finally, 81.3% of the sample reported that they had some type of social support during the immigration years, and 18.7% mentioned that they did not have this support

Tests for Normality

Due to the fact that both stress and self-esteem values were not normally distributed, nonparametric tests were used according to the data analysis plan presented in Chapter 3. The use of nonparametric tests was confirmed by the results of normality tests, as shown in Table 3. As can be seen, $p < 0.05$, thus I can reject the null hypothesis that the data of the study follows the normal distribution.

Table 3

Tests of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Value	df	p	Value	df	p
Stress	0.079	400	0.000	0.986	400	0.001
S-esteem	0.117	400	0.000	0.970	400	0.000

Research Questions 1and 2 Results

RQ1: What is the relationship between recency of immigration and level of stress among immigrants in Canada?

RQ2: What is the relationship between recency of immigration and level of self-esteem among immigrants in Canada?

Stress and self-esteem levels were very similar for recent and nonrecent immigrants; therefore, the null hypothesis was retained for RQ1 and RQ2. There was no significant relationship between immigration within the past 5 years (recent immigrants) and level of stress and self-esteem among immigrants in Canada, compared to nonrecent immigrants (Mann-Whitney U test, $p>0.05$). Results are shown in Table 4.

Table 4

Immigration Status and Stress and Self-Esteem levels

	Stress Score		Self-Esteem Score	
	Recent immigrants ≤5 Years	Older immigrants >5 Years	Recent immigrants ≤5 Years	Older immigrants >5 Years
Mean	12.56[1]	12.84[1]	23.90[2]	23.59[2]
Median	13.00	13.00	24.00	24.00
Std. Deviation	3.389	3.173	1.758	1.865
Minimum	5	6	20	17
Maximum	23	21	28	28
Range	18	15	8	11
Interquartile Range	5	4	2	3
Skewness	.085	.202	.011	-.362
Kurtosis	-.313	-.486	-.341	.653

[1] $p<0.493$, [2] $p<0.167$, Mann-Whitney U test.

Research Question 3 Results

RQ3: Do demographic, individual, or ethnic factors have an impact on the level of stress and self-esteem of new immigrants in Canada?

For this question, the stress and self-esteem scores were not normally distributed, so I used binary logistic regression using stress as the dependent variable (Table 5) and self-esteem scores recoded into binary variables (low/high score) using median as the cutoff point (Table 6). According to the data analysis plan, the demographic variables were age, gender, race, ethnicity, educational level, and place of recruitment. Regarding stress scores, there were no significant results, although there was a marginal significance ($p < 0.071 < 0.10$) for Hispanic participants. More specifically, these participants tended

to have lower stress scores compared to the reference ethnicity category (African) (*OR*: 0.196, 95% *CI*: 0.034-1.150). Regarding self-esteem scores, the only significant result was that Afro-Caribbean immigrants seemed to have more than 4 times the odds of low self-esteem compared to the reference ethnicity category (African) (*OR*: 4.36, 95% *CI*: 1.113-17.078). According to these results, the null hypothesis was rejected as ethnicity seemed to play a significant role in self-esteem of recent immigrants.

Table 5

Demographic, Individual, or Ethnic Factors on Stress Scores of Recent Immigrants

Factor	B	S.E.	p	OR	95% C.I. for OR	
					Lower	Upper
Age	.000	.009	.963	1.000	.982	1.019
Female	-.181	.304	.551	.834	.460	1.513
Race (ref: White)			.373			
Black	-1.149	.692	.097	.317	.082	1.231
Asian	21.041	19783.229	.999	$1.37x10^6$	.000	.
Native Hawaiian/Alaska	-1.163	1.696	.493	.313	.011	8.690
American Indian	.848	1.669	.611	2.336	.089	61.552
Multiple Races	-1.814	1.900	.340	.163	.004	6.756
Schooling (ref: grade 9-12)			.617			
College 1-3 years	20.527	40192.760	1.000	$821x\ 10^6$	.000	.
College graduate	20.366	40192.760	1.000	$699x10^6$	.000	.
Post graduate	20.849	40192.760	1.000	$1133x10^6$	.000	.
Ethnicity (ref: African)			.378			
African American	-.451	.739	.541	.637	.150	2.709
Afro Caribbean	-.233	.617	.706	.792	.237	2.654
Canadian	-1.484	.897	.098	.227	.039	1.314
East Asian	-23.039	19783.229	.999	.000	.000	.
European	-.512	.824	.534	.600	.119	3.012
Hispanic	**-1.628**	**.902**	**.071**	**.196**	**.034**	**1.150**
Japanese	-21.697	19783.229	.999	.000	.000	.
Middle Eastern	-2.320	1.794	.196	.098	.003	3.306
South Asian	-2.517	1.805	.163	.081	.002	2.776
Other	-.207	1.673	.901	.813	.031	21.580
Recruitment (ref: Church)			.826			
Community Center	-.131	.359	.716	.878	.435	1.772
Groceries	.134	.392	.734	1.143	.530	2.466
Constant	-19.659	40192.760	1.000	.000		

Table 6

Demographic, Individual, or Ethnic Factors on Self-Esteem Scores of Recent Immigrants

Factor	B	S.E.	p	OR	95% C.I. for OR	
					Lower	Upper
Age	.007	.009	.459	1.007	.989	1.026
Female	-.314	.303	.300	.731	.404	1.323
Race (ref: White)			.867			
Black	-.419	.681	.538	.658	.173	2.500
Asian	-.427	1.210	.724	.652	.061	6.993
Native Hawaiian/Alaska	1.362	1.741	.434	3.903	.129	118.331
American Indian	.081	1.715	.962	1.084	.038	31.245
Multiple Races	1.049	1.907	.582	2.856	.068	119.961
Schooling (ref: grade 9-12)			.251			
College 1-3 years	-21.846	40195.298	1.000	.000	.000	.
College graduate	-21.151	40195.298	1.000	.000	.000	.
Post graduate	-21.717	40195.298	1.000	.000	.000	.
Ethnicity (ref: African)			.689			
African American	.799	.824	.332	2.223	.442	11.179
Afro Caribbean	**1.473**	**.697**	**.035**	**4.360**	**1.113**	**17.078**
Canadian	.410	.913	.653	1.507	.252	9.019
East Asian	1.551	1.404	.269	4.714	.301	73.876
European	.964	.859	.262	2.622	.487	14.104
Hispanic	.366	.929	.693	1.442	.234	8.902
Japanese	1.490	1.411	.291	4.436	.279	70.491
Middle Eastern	.931	1.832	.611	2.536	.070	91.871
South Asian	1.319	1.835	.472	3.740	.103	136.311
Other	-.143	1.718	.934	.867	.030	25.128
Recruitment (ref: Church)			.661			
Community Center	-.064	.358	.859	.938	.466	1.891
Groceries	-.361	.400	.368	.697	.318	1.528
Constant	20.157	40195.298	1.000	567542316.669		

Research Question 4 Results

RQ3: Do provided and perceived social support networks have an impact on the levels of stress and self-esteem of recent immigrants in Canada?

According to the results of Mann-Whitney U test, social support did not have a significant effect on the stress and self-esteem scores of recent immigrants ($p > 0.05$). Therefore, the null hypothesis for this research question was accepted.

Table 7 shows the results of data analysis for RQ3.

Table 7

Relationship Between Social Support and Stress and Self-Esteem Scores of Recent Immigrants

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Stress score	221	12.5566	3.38885	5.00	23.00
S-esteem score	221	23.9005	1.75785	20.00	28.00

Ranks

	Social Support	N	Mean Rank	Sum of Ranks
Stress score	yes	180	109.64	19735.50
	no	41	116.96	4795.50
	Total	221		
S-esteem score	yes	180	111.68	20103.00
	no	41	108.00	4428.00
	Total	221		

Test Statistics

	Stress score	S-esteem score
Mann-Whitney U	3445.500	3567.000
Wilcoxon W	19735.500	4428.000
Z	-.664	-.338
p	.507	.735

Summary and Transition

The sample was located in the greater Toronto region of Canada. The final sample consisted of 400 participants (47.3% males and 52.7% females). The average age of the participants was 42.8 years (*SD* = 15.8). Regarding immigration status, 55.3% were recent immigrants (0-5 years) and 44.7% were nonrecent immigrants. Due to the fact that both stress and self-esteem values were not normally distributed, non-parametric tests were used. According to the Mann-Whitney U test, stress and self-esteem levels were very similar for both recent and nonrecent immigrants; therefore, the null hypothesis was accepted. There was no significant relationship between immigration within the past 5 years (recent immigrants) and level of stress and self-esteem among immigrants in Canada, compared to nonrecent immigrants. Further, according to logistic regression results regarding stress scores, there were no significant findings, although there was a marginal significance ($p < 0.071 < 0.10$) for participants with Hispanic ethnicity. More specifically, these participants tended to have lower stress scores compared to the reference ethnicity category (African) (*OR*: 0.196, 95% *CI*: 0.034-1.150). Regarding self-esteem scores, Afro-Caribbean immigrants (code: ethnicity 2) had more than 4 times the odds of low self-esteem compared to the reference ethnicity category (African) (*OR* : 4.36, 95% *CI*: 1.113-17.078). Finally, Mann-Whitney U tests revealed that social support did not have a significant effect on the stress and self-esteem scores of recent immigrants. Chapter 5 includes an interpretation the results, recommendations for practice and future research, limitations of the study, and a conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of the study was to assess the level of stress and self-esteem of recent (less than 5 years) and nonrecent immigrants in Toronto, Canada, and to investigate the impact of social support networks on the promotion of mental well-being among new immigrants. A convenience sample of immigrants in Toronto completed questionnaires that addressed potential associations between the stress and self-esteem levels of participants, including questions on demographics and social support networks. Canada is historically a Eurocentric nation, and immigration has become more diverse over the years (CAMH, 2009; GOC, 2011). There have been consistent findings of high incidence of mental illness among migrant and ethnic groups (Morgan & Fearon, 2007). Understanding the role of social support for new immigrants is evolving. In Chapter 5, I provide the key findings of the study, interpretation of the results, limitations of the study, and recommendations for practice and future research.

Key Findings

The final sample consisted of 400 participants (47.3% males and 52.7% females) with an average age of 42.8 years (*SD* = 15.8). Regarding immigration status, 55.3% were recent immigrants (0-5 years) and 44.7% were nonrecent immigrants. Stress and self-esteem levels were found to be very similar for both recent and nonrecent immigrants, because they did not significantly differ between these two groups of immigrants. In addition, according to logistic regression results for stress scores in recent immigrants, gender, race, ethnicity, educational level, and place of recruitment were not significantly related to stress level, although there was a marginal significance ($p < 0.071$

< 0.10) for participants with Hispanic ethnicity who had lower stress scores compared to the reference ethnicity category (African) (*OR*: 0.196, 95% *CI*: 0.034-1.150). Regarding self-esteem scores, Afro-Caribbean recent immigrants appeared to have more than 4 times the odds of low self-esteem compared to the reference ethnicity category (African) (*OR*:4.36, 95% *CI*: 1.113-17.078). Finally, bivariate analysis revealed that social support did not have a significant effect on the stress and self-esteem scores of recent immigrants.

Interpretation of the Findings

Social support did not appear to have a significant effect on the stress and self-esteem levels of recent immigrants in this study, although this effect was clearly demonstrated in other studies (Grunge & Collins, 2007). This inconsistency can be partly attributed to the fact that age of immigrants is reported in the literature as a significant determinant of stress and self-esteem, and younger adults are more prone to adapt quickly to the immigration process due to involvement in postsecondary education and other extracurricular or social activities providing greater exposure to other cultures and backgrounds (Bhugra & Jones, 2001; Statistics Canada, 2011). In the present study, the average age was relatively low (<43 years) and therefore participants may have experienced more successful social integration in their new country. The average age of participants may also explain the finding that there were no significant differences in stress and self-esteem scores between recent and nonrecent immigrants (The Canadian Facts, 2013).

Another interesting result of this study was that recent immigrants with Hispanic ethnicity tended to have lower stress scores compared to their African counterparts.

According to the literature, *familismo* (the preference for maintaining a close connection to the family) protects Latino youth and parents from negative mental health outcomes, although the potential impact of discrimination is not decreased (Ayón, Marsiglia, & Bermudez, 2010). Religious attendance has also been found to help Hispanics have lower stress (Ai, Aisenberg, Weiss, & Salazer, 2014). Further, maintaining their culture in their lives and spending time with those who also seeking to do this have been considered significant factors in reducing immigration stress (Dawson, 2009). Living in an area where people of similar ethnic background reside can increase the sense of belonging and acceptance, especially for people involved in similar community events or gatherings (Dalgard & Thapa, 2007). Finally, better education and English proficiency of Hispanics compared to other immigrants have been found to have a positive effect on health of this group (Ai et al., 2014).

Another significant finding of this study was that Afro-Caribbean recent immigrants appeared to have lower self-esteem compared to African counterparts. Williams et al. (2007) found similar results that there were higher risks for psychiatric disorders among Afro-Caribbean immigrants, which may reflect increased societal stress and downward social mobility in relation to African immigrants in a new country. Therefore, more efforts are needed to integrate this high-risk group in Canada.

Limitations of the Study

The limitations of the study relate to unintentional omission of the question regarding employment status of the participants, as this is an important component of stress levels. Financial status often determines an individual's overall social and

economic status in society. An example is a participant with secondary education may have limited career options, or the ability to move forward in a career may be hindered by educational status.

Validity and reliability of participants' responses to the survey questions depended on the circumstances and mind-set (e.g., mood) of the participants at that time.

Because of the cross-sectional design, the exposure and outcome were studied simultaneously; therefore, it was difficult to determine the direction of the association (Levin, 2006). To address this limitation, I presented the results as associations only, and appropriate statistical analysis, such as regression, was used to ensure valid results. Generalization of results is limited as immigrants in Canada may experience different circumstances compared to immigrants in other developed countries.

In addition, the cutoff value for determining the recency of immigration (5 years) could be problematic for detecting meaningful differences between recent and older immigrants; therefore, further research is needed to validate this value. Finally, there were some very high odds ratios in the regression tables 5 and 6, therefore the models may be problematic and need to be revised in future research, although there was adequate fit (Hosmer-Lemeshow test's p value > 0.05).

Recommendations

Further researchers may investigate the importance of employment and socioeconomic status in maintaining and contributing to mental and physical health of new immigrants. Immigration centers such as airport information kiosks need to provide support systems that are easily accessible, and provide links to resources that can offer

information on all social supports available. Encouraging increased self-esteem in new and older immigrants can be done by educating community members and by facilitating understanding of potentially stressful situations that may occur for new immigrants and how to alleviate them. Recent and older immigrants may not reach their previous financial or social status compared to what they had in their former country; thus, in their new home Canada they may feel emotionally and physically more unsafe.

Communities can identify their organizational leaders with or without their support groups and voice their experiences and concerns regarding the immigration process when settling in Canada. Leaders can address what resources were helpful and those that were not so helpful. Demographics play a role as the regions that new immigrants settle in may influence where and how these immigrant communities socialize with each other. Toronto Public Health (TPH) has identified that self-reporting of poorer health, whether physical or mental, is not always consistent or done in certain cultural groups (The Canadian Facts, 2013). Positive health outcomes may be increased if reporting is done consistently when these communities gather together. Policymakers in collaboration with community leaders have to understand the needs of their communities to facilitate and ensure optimal mental and physical wellness of current and future community members. Emphasizing the importance of self-reporting of mental health symptomology can ensure earlier interventions to prevent further debilitating health effects.

Organizations such as churches and community centers that host social events have community leaders who can guide policymakers and other influential members of

the public. Creating further awareness and decreasing the stigmas of mental health among community members are necessary. Ensuring these members understand mental health symptomology and the resources or strategies available to them is essential for social change.

Continued engagement of communities and organizations is needed to maintain and promote mental and physical wellness among their members by using social supports. Diversity of Canadian communities can be maintained by promoting the optimal mental wellness of a growing multicultural population.

In addition, the impact of immigrating from warn-torn countries can be investigated in the future, in order to provide new insights on this significant aspect of immigration. Finally, according to Waters, Kasinitz, and Asad (2014), future researchers should try to collect data to differentiate immigrants and long-settled populations among racial minorities. Waters et al. stated that "the uncritical acceptance of racial categories—white, black, Asian, Latino, and Native American—makes it hard to differentiate long-standing Latino, Asian, and black populations rom recent immigrants. As a result, the relative success of immigrants and their children may be obscuring the continuing problems faced by members of long-standing minority populations" (p. 384).

Social Change Implications

Given the limitations described above, the findings of this study may promote positive social change by providing useful information on stress and self-esteem levels of new immigrants in Canada. This study provided new insights, especially regarding the role of ethnicity in stress and self-esteem levels of immigrants, which may help future

researchers investigate the complicated political dynamics of immigration and especially those of African American's (Waters et al., 2014). Black immigrants seem to have more mental health issues compared to other ethnicities, so efforts should be made to improve their health outcomes and to provide the best possible integration process. The potential impact for social change is to add the element of hope and increase public awareness concerning mental health issues among immigrants. Facilitating the integration of newcomers and addressing the persistent limitation of long-standing minorities, especially in the United States and Canada, may be beneficial (Waters et al., 2014).

Conclusion

The immigration process may exacerbate a number of physical and mental health symptoms (Sher & Vilens, 2010) such as high blood pressure and major depression (Williams et al., 2010). An important characteristic of the immigrants' diseases is that "the earlier the onset of illness, the greater severity of disease and poorer survival" (Williams, et al., 2010, p.3). A balance of social and physical activities is the basis for a well-rounded individual/community (Grunge & Collins, 2007). Social activities and scheduled group interactions may be effective in promoting optimal health outcomes. This study highlighted that fact that ethnically targeted support groups and well-organized resource centers, as well as availability of culturally familiar social liaisons, may create less stressful and more supportive circumstances for new immigrants to promote their successful integration in their new home.

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Appendix A: Perceived Stress Scale- 10 Item

Perceived Stress Scale- 10 Item

Instructions: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

1. In the last month, how often have you been upset because of something that happened unexpectedly?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

2. In the last month, how often have you felt that you were unable to control the important things in your life?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

3. In the last month, how often have you felt nervous and "stressed"?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

5. In the last month, how often have you felt that things were going your way?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

7. In the last month, how often have you been able to control irritations in your life?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

8. In the last month, how often have you felt that you were on top of things?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

9. In the last month, how often have you been angered because of things that were outside of your control?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

Appendix B: Rosenberg Self-Esteem Scale

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. On the whole, I am satisfied with myself. SA A D SD

2.* At times, I think I am no good at all. SA A D SD

3. I feel that I have a number of good qualities. SA A D SD

4. I am able to do things as well as most other people.SA A D SD

5.* I feel I do not have much to be proud of. SA A D SD

6.* I certainly feel useless at times. SA A D SD

7. I feel that I'm a person of worth, at least on an equal plane with others. SA A D SD

8.* I wish I could have more respect for myself. SA A D SD

9.* All in all, I am inclined to feel that I am a failure. SA A D SD

10. I take a positive attitude toward myself. SA A D SD

Appendix C: Demographic and Social Support Network Data

The following group of questions gathers information about you. Please fill in the answer or check the box that best represents you.
Please answer all questions and mark only one box per item.

1. What is your age in year? _____

2. What is your gender?

▢ Male
▢ Female

3. Which one of the following would you say is your race?

▢ White
▢ Black
▢ Asian
▢ Native Hawaiian or other Pacific Islander
▢ American Indian or Alaska Native
▢ Multiple races

4. Which of the following best describes your ethnicity?

▢ African
▢ African American
▢ Afro-Caribbean
▢ Canadian
▢ East Asian (China, Korea, Mongolia, Tibet)
▢ European
▢ Hispanic /Latino
▢ Japanese
▢ Middle Eastern or Arab
▢ South Asian (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka)
▢ Other

5. What is the highest grade or year of school you completed?

▢ Never attended school or only Kindergarten
▢ Grades 1 through 8
▢ Grades 9 through 11 (some high school)
▢ Grade 12 or GED (High School Graduate)
▢ College 1 year to 3 years (some college or technical school)
▢ College 4 years or more (college graduate)
▢ Graduate school or advanced degree

6. How many years are you living in Canada? _____

7. Which is your country of origin? _____

8. Have you ever used as social support network, such as friends, religious organizations, settlement programs etc. to help you to be adapted in the new environment?

- ▢ Yes
- ▢ No

9. Place of recruitment……..