BEING BRAZILIAN, BECOMING CANADIAN: ACCULTURATION STRATEGIES, QUALITY OF LIFE, NEGATIVE AFFECT, AND WELL-BEING IN A SAMPLE OF BRAZILIAN IMMIGRANTS LIVING IN THE GREATER TORONTO AREA

by

Iara Regina Da Costa

A dissertation submitted in conformity with the requirements for the degree of Doctor of Philosophy
Department of Applied Psychology and Human Development
Ontario Institute for Studies in Education of the University of Toronto

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Acculturation is a predominant feature of today’s society and one that has unique implications for immigrants’ mental health. Given that two thirds of Canada’s population growth is due to immigration, understanding the effects of acculturation on newcomers should be a central focus of academic research. The present study utilized an exploratory quantitative method to investigate the associations between acculturation strategies, quality of life, and negative affect in a sample of 180 Brazilian immigrants living in the Greater Toronto Area. The mediating and moderating roles of quality of life (QOL) were explored, as well as which patterns of acculturation strategies were associated with enhanced well-being, represented by low negative affect (NA), high QOL, and high Satisfaction with Life in Canada (SLCI). Clusters analysis identified patterns of acculturation strategy use, resulting in four acculturation profiles: integrated, assimilated, separated, and marginalized. Results indicated that QOL did not act as either a mediator or moderator of the relationship between acculturation profiles and NA. With regard to well-being indicators, acculturation profiles successfully predicted NA and SLCI, with the Assimilated being the most favourable profile evidenced by its lowest NA and highest SLCI.
levels. While acculturation profiles did not predict QOL, the trend of the Assimilated profile being predictive of favourable well-being was also present as its members reported slightly higher QOL than their counterparts from other profiles. Well-being risk and protective factors are presented. The results highlight the importance of including control variables in future research in order to uncover the unique impact of acculturation on the mental health of immigrants. Implications for practice and future research are also discussed.
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As I exit the defence room to wait for my committee to deliberate on the result of my defence, feeling bewildered, relieved, ecstatic, and lost, I see my husband, Christian, and my son, Luca. There, in that quick moment, I saw both the culmination of my work and the reason I was able to complete it. It is very difficult to survive graduate school without a strong social support network. Seeing them both there was like coming home. Christian, thank you for your love, patience, understanding, and willingness to overcome obstacles with me. Most importantly, thank you for giving me the opportunity to experience what it is like to feel supported. When you saw me at that moment, no words were needed; you knew what it represented to me. Luca, my love for you has no bounds. Thank you for loving me back and for being one of my greatest teachers.

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Chapter 1:

Introduction

Acculturation has become an inescapable reality in modern society. The movement of people across countries, globalization, and the increased speed of information in the past decades have led to an increase in intercultural contact and the blurring of boundaries between nations. This contact between cultures leads to acculturation, or the change process that affects the original cultural patterns of the individuals involved in an intercultural contact (see the Acculturation section of the literature review chapter for further elaboration on the concept of acculturation). Acculturation is not a new phenomenon and its study is not very recent (Berry, 2008); however, given the pervasiveness of acculturation in everyday modern life, its study has become more prominent and a major focus of academic interest (Yoon et al., 2013).

Acculturation has been extensively studied in the field of mental health and counselling psychology (Yoon, Langrehr, & Ong, 2011). The findings of research investigating the effects of acculturation on individuals’ psychological and socio-cultural adaptation show that acculturation to a new society could lead to both negative and positive mental health outcomes (Yoon et al., 2013), suggesting a complex relationship between acculturation and mental health (Hwang & Myers, 2007; Sam & Berry, 2010; Yoon, Lee, & Goh, 2008). For example, the various combinations between strategies that people use during acculturation, characteristics of the dominant society, cultural compatibility between culture of origin and dominant culture, as well as demographic, ethnic, and personality factors seem to predict to varying degrees whether mental health outcomes will be positive or not (Obasi & Leong, 2009; Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Taloyan, Johansson, Saleh-Stattein, & Al-Windi, 2011; Yoon et al., 2013; Yoon et al., 2011).
Among the above factors, the strategies individuals employ during acculturation seem to be the factor most malleable to voluntary changes, and are, therefore, an important area of focus to promote a sense of agency when so much is out of the immigrant’s control. The theory of acculturation strategies offers a different understanding of the acculturation process when compared to unidimensional perspectives that postulate that intercultural contact leads to two polar opposites (acculturated vs. non-acculturated). The acculturation strategies theory (e.g., Berry, 1999) views acculturation as a bidimensional phenomenon where there are varying degrees of affiliation with the heritage and dominant cultures.

Acculturation strategies have been extensively studied with various cultural groups in Canada and beyond (e.g., Berry, Kim, Power, Young, & Bujaki, 1989; Berry, Phinney, Sam, & Vedder, 2006; Berry & Sabatier, 2010; Costigan & Su, 2004; Neto, 2002; Ryder, Alden, & Paulhus, 2000). Study designs have progressed over the years, becoming increasingly more complex and including various moderating and mediating factors of the relationship between acculturation and mental health (Kimbro, Gorman, & Schachter, 2012; A. M. Miller et al., 2006; ValenciaGarcia, Simoni, Alegria, & Takeuchi, 2012; Yoon et al., 2013; Yoon et al., 2011). Such studies have been replicated with various ethnic groups, demonstrating that results have varied according to ethnicity (Schwartz et al., 2010) both in terms of the preferred acculturation strategy and regarding their impacts on psychological outcomes. Up to 2008, however, no such studies existed with Brazilians living in Canada (Costa, 2008a). The attempt to include Brazilians in the Latino category, which has been studied at length, has been questioned (e.g., Magalhães, Gastaldo, Martinelli, Hentges, & Dowbor, 2008).

The study of acculturation and its effects for immigrants living in Canada is an important endeavour given that Canada relies on immigration for its socio-economic growth, and
immigration is perhaps the most concrete context within which acculturation occurs. Among the G8 countries, Canada is the nation with the highest population growth between the last two censuses (2006 and 2011) largely due to immigration, rather than natural increase. Migratory increase continues to be responsible for two thirds of Canada’s population growth (Statistics Canada, 2006a, 2012) making acculturation an important part of life in Canada. This is particularly applicable, given that acculturation impacts members of both non-dominant and dominant cultures (Redfield, Linton, & Herskovits, 1936; as cited in Berry, 1997), as they are both affected by the process of change that results from intercultural contact. This places acculturation as one of Canada’s distinct characteristics and one which is likely to impact the life and structure of Canadian society.

Given the above context, it is important to consider the effects of acculturation on Canadians’ mental health. A recent report produced jointly by the Institute for Clinical Evaluation Sciences and Public Health Ontario indicated that “the burden of mental illness and addictions in Ontario is more than 1.5 times that of all cancers, and more than seven times that of all infectious diseases” (Ratnasingham, Cairney, Rehm, Manson, & Kurdyak, 2012, p. 7). The report further stated the burden of mental illness and addiction is even more evident at a young age, with increased chronicity, and as a result of major life transitions. It is well known that immigration represents a significant life transition (Khan & Watson, 2005; Lee, 2010; Levitt, Lane, & Levitt, 2005), which goes beyond finding new accommodations, jobs, and learning a new language. The changes brought about by immigration and the consequent acculturation process directly impact immigrants’ sense of self, affect, relationships, and satisfaction with life (Yoon et al., 2013). In addition, the process of acculturation may be accompanied by a series of
barriers identified as social determinants of health, such as susceptibility to social exclusion and
discrimination, unemployment, and various systemic barriers (Mikkonen & Raphael, 2010).

Understanding the mental health needs of immigrants to Canada is perhaps even more important in metropolitan areas, which receive the majority of immigrants. For example, Toronto is among the census metropolitan areas with the largest population growth due to immigration (Statistics Canada, 2012). Among the various ethnic groups present in Toronto, the present study focused on the Brazilian immigrant community as it is a growing, yet understudied population. Brasch (2010) estimated that the Brazilian population in Toronto was between 10,000-12,000 individuals. Even though this number may account for a small portion of Toronto’s immigrant population, it represents almost half of the projected 28,000 Brazilians living in Canada (calculations based on estimates provided by Canadian and Brazilian governments; Citizenship and Immigration Canada, 2013; Ministério das Relações Exteriores, n.d.). The growing Brazilian immigrant population in Canada, particularly in Toronto, has perhaps ignited scholars’ recent interest in this group (e.g., Rosana Barbosa, 2009; Brasch, 2010; Costa, 2008a, 2008b, 2010; Magalhães et al., 2008); however, research on this group remains scarce, in particular from a psychological perspective (Costa, 2008a).

The first study in the field of psychology with Brazilians in Canada was conducted by Costa (2008a, 2008b, 2010), who investigated the relationship between acculturation strategies (e.g., Berry, 1999) and the incidence of depressive symptomatology in the Brazilian immigrant community living in Toronto. The percentage of participants in that study that reported depressive symptomatology (27%) was more than three times as high to that found in the general Canadian population (i.e., 8%; Health Canada, 2002). This result alone reinforces the importance of deepening the understanding of the mental health needs of Brazilian immigrants.
Costa’s (2008a, 2008b, 2010) study also raised the question whether quality of life or life satisfaction plays a role in the relationship between acculturation and mental health. There was a weak, but significant relationship between depressive symptomatology and the Separation acculturation strategy, and these two variables shared a common predictor, the Satisfaction with Life in Canada Index (SLCI). The SLCI was the primary predictor of, and had a negative correlation with, both variables, suggesting that the less satisfied participants were with their life in Canada, the more focused on their culture of origin they were and the more depressive symptoms they endorsed. It was hypothesized that low scores on the SLCI scale were associated with experiences of loss, hopelessness, worthlessness, helplessness, lack of connectedness, and dissatisfaction with life common to depressive symptomatology (Costa, 2008a, 2008b, 2010).1

The finding that SLCI had a significant predictive role in the choice of acculturation strategy and in the endorsement of depressive symptomatology suggested that life satisfaction might be another factor affecting Brazilians’ adaptation to Canada, which required examination. The investigation of QOL’s mediating and moderating roles is consistent with the trend in acculturation strategy studies of including moderator and mediator variables in research designs (Kimbro et al., 2012; ValenciaGarcia et al., 2012; Yoon et al., 2011). Such analysis was one of the objectives of this study. Satisfaction with life has been conceptualized as Quality of Life (QOL) by many researchers (Bognar, 2005; Frisch, 2004; Moons, Budts, & De Geest, 2006) and will be used herein interchangeably with satisfaction with life.

While Costa’s (2008a, 2008b, 2010) study was the first to shed light on the psychological aspects of Brazilians’ process of acculturation in Toronto, it could be improved in several ways. For example, it used only one measure of mental health adaptation (depression),

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1 An updated results sheet has since been produced and is available here under Appendix A. The updated results
while other mental health indicators could greatly increase the understanding of participants’ experiences; it investigated the direct relationship between acculturation strategies and mental health without considering intervening variables, such as QOL; it did not control for covariates, which may have confounded the results obtained; and it did not investigate the complex patterns in which participants may combine various acculturation strategies, rather than utilize single strategies. A study addressing these aspects would not only be consistent with more recent research in this field, but would also be more coherent with the complexities involved in the acculturation process. The present study was designed to address these gaps.

**Purpose of this study**

The main purpose of this study was to investigate the associations between acculturation strategies, quality of life, and negative affect, and how acculturation strategies related to overall well-being for a sample of Brazilian immigrants living in the Greater Toronto Area. In particular, it investigated the potential mediating and moderating roles of QOL in the relationship between acculturation and negative affect as well as which acculturation strategies were more conducive to well-being, represented by low negative affect, high QOL, and high satisfaction with life in Canada.

In order to achieve these goals, the present study extended Costa’s study (2008a, 2008b, 2010) in several ways. First, it used multiple indicators of mental health. Instead of focusing exclusively on depression, the present study assessed depression, anxiety, and stress. The scores on these measures were subsequently combined into a negative affect composite score. Second, an extensive QOL instrument was administered in order to elucidate the role of QOL in the relationship between acculturation strategies and negative affect. Third, it used QOL as both a

continue to support the rationale for the present study.
predictor and as an outcome variable. This was important as there do not seem to be any studies investigating the mediating and moderating aspects of QOL. In addition, when used as an outcome, QOL is often grouped into a composite score combined with other well-being indicators (e.g., Berry et al., 2006; Chen, Benet-Martínez, & Bond, 2008; Yoon, Hacker, Hewitt, Abrams, & Cleary, 2012); while meaningful, this procedure limits the understanding of the unique impact of acculturation on QOL. Fourth, control variables integrated regression analyses in order to increase rigor and uncover the distinct contribution of each predictor. Fifth, it utilized a more current and sophisticated method to analyse acculturation strategies patterns. Rather than comparing single strategies separately, cluster analyses revealed complex patterns of acculturation strategies combination. Finally, concerted efforts were given to recruit a larger number of undocumented participants, as this group was underrepresented in Costa’s study (2008a, 2008b, 2010).

This manuscript is organized into six chapters: introduction, literature review, research method, results, discussion, and conclusion. The next section, Chapter 2, reviews the main constructs that provided the theoretical background for this study.
Chapter 2:

Literature Review

This chapter reviews the literature on acculturation, mental health, and quality of life, as well as the intersections among them. I also provide an overview of Brazil, its people, and the life of Brazilians living in Toronto as an important context within which to situate the results of this study.

Acculturation

A largely used definition of acculturation was proposed by Redfield, Linton, and Herskovits (1936, as cited in Berry, 1997). According to their definition, “acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups” (p. 7). Based on a critical view of culture (Pickering, 2001; Wright, 1998) and on the tenets of critical multicultural counselling (Arthur & Collins, 2005; Moodley & Palmer, 2006), I propose an adaptation of the above definition of acculturation. The resulting definition states that acculturation is the change process that takes place when groups or individuals from different socio-historical contexts come into continuous contact affecting the original culture patterns and creating new power dynamics for all and between groups and individuals involved. Changes experienced by individuals during the process of acculturation may range from simple behavioural shifts (e.g., ways of speaking, dressing, eating, etc.) to more problematic or adverse effects of acculturation that may result in acculturative stress (Sam & Berry, 2010). Despite the possibility that anyone living in a culturally plural society may

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2 Excerpts of the Acculturation as well as the Mental Health and Acculturation sections were partially reproduced or adapted from previous works (Costa, 2008a, 2008b, 2010) in accordance with the University of Toronto School of Graduate Studies guidelines (http://www.sgs.utoronto.ca/informationfor/students/finup/producingthesis/copyrt.htm).
undergo a process of acculturation, research in this field has predominantly focused on immigrants, refugees, sojourners, and ethnic minorities (Sam & Berry, 2010). Furthermore, much of the literature that has explored acculturation has demonstrated both positive and negative outcomes associated with it, depending on how the process unfolds within a particular context. For example, assimilation to a mainstream, dominant culture has been shown to be associated with negative mental health outcomes including depression, anxiety, alcoholism, drug use, and psychological distress. Acculturation is also associated with a number of positive behavioural and health outcomes including self-esteem, educational attainment, career orientation, help-seeking behaviours, life satisfaction, and positive affect (Sood, Mendez, & Kendall, 2012; Yoon et al., 2012; Yoon et al., 2011).

There are two major perspectives from which scholars have studied acculturation: the unidimensional model (also called unidirectional and linear), and the bidimensional model (sometimes referred to as bidirectional or orthogonal) (Costigan & Su, 2004; Navas et al., 2005; Ryder et al., 2000), while attempts at developing a third perspective have also been made (Ferguson, Bornstein, & Pottinger, 2012; Flannery, Reise, & Yu, 2001). These models reflect the extent to which an individual is affiliated to the non-dominant culture and the dominant culture. The unidimensional model sees acculturation on a linear continuum (Gans, 1979) on which an individual moves from unacculturated (entirely identified with the culture of origin) to acculturated or assimilated (completely identified with the dominant culture). Measures of the unidimensional model do not separate the process of incorporating mainstream culture from the process of distancing from one’s heritage culture (Yoon et al., 2013), implying that the more one interacts with the dominant culture, the more they distance themselves from their heritage culture. It also predicts that, over time, assimilation is the most frequent outcome (Flannery et
al., 2001) and presupposes that at the extremes of the continuum, both cultures are mutually exclusive and negatively correlated, which is a questionable assumption.

One criticism of research that has employed the unidimensional model is that it has focused on direct, significant associations between acculturation and outcome variables of interest (e.g., psychological or behavioural outcomes). Discovery of significant, direct associations between acculturation and these outcomes does not provide conclusive evidence or causality as to how and to what extent acquisition of mainstream, or the dominant culture, versus distance from the heritage culture is related to psychological and behavioural outcomes (Yoon et al., 2013; Yoon et al., 2012). In contrast to the unidimensional perspective, the bidimensional model argues that one’s affiliation to culture of origin and dominant culture happens independently or orthogonally (Costigan & Su, 2004), thereby allowing for the two cultures to coexist in the individual’s repertoire of behaviour, attitudes, beliefs, and multiple identities. The degree to which an individual is connected to each of the cultures is represented as a bidimensional matrix that results in four potential outcomes, from integration of cultures to isolation from both cultures.

Acculturation theory, research, and measurement have shifted focus from the unidimensional model to the bidimensional paradigm (Yoon et al., 2011). Yoon and colleagues (2011) conducted a content analysis of 138 quantitative empirical studies among five major journals in counseling and counseling psychology. Although acculturation was presented as a unidimensional construct in 44.4% of studies (versus 29.6% of studies utilizing the bidimensional model), awareness increased over time regarding the measurement and theoretical limitations of the unidimensional model. Since 2005, the use of bidimensional measures has exceeded the use of unidimensional measures (Yoon et al., 2013; Yoon et al., 2011). In a review
by Chirkov (2009), 55% of studies utilized a bidimensional theoretical framework of
acculturation. The decision to use the bidimensional model for the present study is consistent
with this trend, and it was made because the bidimensional model is philosophically more in line
with the underlying theory of multicultural counselling and its embedded premise that culture is
fluid, dynamic, and largely influenced by power relations (Moodley & Palmer, 2006; Wright,
1998). The bidimensional model is described below.

**Theory of Acculturation Strategies.**

The theory of acculturation strategies utilizes the bidimensional model of acculturation;
as such, these two terms will be used interchangeably throughout this review. As mentioned, the
bidimensional model is a broader approach to acculturation than the unidimensional model
(Ryder et al., 2000); it has been extensively validated by empirical research (e.g. Berry et al.,
1989; Kosic, 2002; Krishnan & Berry, 1992), and has been utilized in the study and prediction of
mental health outcomes (e.g. Berry, 1998; Ward & Kennedy, 1994). John Berry, one of the main
theoreticians of the bidimensional model, has conducted a large number of studies and
publications in partnership with other professionals around the world (e.g. Berry & Annis, 1974;
Berry & Kalin, 1995; Berry, Kim, & Boski, 1987; Berry et al., 1989).

According to Berry (2003), acculturating individuals are faced with two main issues: “to
what extent do people wish to have contact with (or avoid) others outside their group?” and “to
what extent do people wish to maintain (or give up) their cultural attributes?” (Berry, 2001, p.
618). The interplay between attitudes and behaviours that individuals use to respond to these two
issues results in the strategies that they utilize during acculturation.

When placed on quadrants, the attitudes and behaviours regarding these two dimensions
lead to four possible orientations toward acculturation: assimilation, separation, integration, and
marginalization (Berry, 2001; Berry et al., 1989). Figure 1 demonstrates the distribution of the acculturation strategies in the four quadrants. The first two strategies imply an ‘either-or’ choice. For example, assimilation is when an individual values contact with other groups to the detriment of contact with their culture of origin; and separation is when the individual seeks to maintain their culture of origin and avoid interaction with other groups. The latter two strategies involve a ‘both-or-none’ choice. For example, integration represents the maintenance of one’s non-dominant culture and simultaneous interaction with other groups, while marginalization represents distancing oneself from one’s heritage culture and avoidance of interaction with the dominant culture (Berry, Poortinga, Segall, & Dasen, 2002). Berry’s bidimensional model of acculturation strategies has become a common language in acculturation literature and research (Yoon et al., 2011).

Preferences for acculturation strategies are not static; in fact, they may change over time as individuals experience the outcomes of interaction, or lack thereof, with the dominant society.

Figure 1. Acculturation Strategies. Adapted from Berry, 2001 (as seen in Costa, 2008a).
(Berry, 1997; Navas et al., 2005), and situational factors (Sam & Berry, 2010; Sirin & Fine, 2007), and they may vary depending on the nature of the domain: for instance, materialistic versus symbolic (Navas et al., 2005) or private versus public (Berry, 1997). These preferences may also vary depending on the discrepancies between the values of the heritage and dominant cultures. For example, Yu and Wang (2011) found that preference for integration and separation was associated with being female and male, respectively. They hypothesized that these preferences were related to the social and cultural differences between Chinese and German cultures, implying that gender role differences and expectations in the two cultures may have played a role in participants’ acculturation strategy use. Berry (2005) has also suggested that the choice of strategy may be limited by the dominant culture’s openness to cultural diversity or by the nature of cultural contact. For example, colonialism has historically enforced adoption of the dominant cultural values simultaneous with the loss of non-dominant cultural expressions as a form of power assertion.

The above description of Berry’s acculturation strategies model demonstrates that acculturation is a complex, circumstantial, dynamic, relative, and mutable process (Padilla & Perez, 2003). Chapter 3 describes in detail the measurement of acculturation strategies as proposed by the bidimensional model. The following section explores the relationship between acculturation and mental health from the unidimensional and bidimensional perspectives.

**Mental health and acculturation**

Mental health and mental health difficulties are cultural phenomena as is any human experience. There are many studies demonstrating that notions and experiences of mental health and illness are constructed cultural contexts. For example, it is widely accepted that there are linguistic differences across cultures for the expression of emotions (such as those associated
with depression) and that, in some cultures, the word ‘depression’ is nonexistent (see Pilgrim & Bentall, 1999 for a review). Similarly, depending on their cultural backgrounds, individuals may report somatic or behavioural symptoms more spontaneously than emotional signs of a specific mental health difficulty, and vice-versa (Jadhav, Weiss, & Littlewood, 2001; James, Navara, Clarke, & Lomotey, 2005). Various categories of mental health difficulties, such as “ataque de niervos,” “mal de ojo,” “pibloktoq,” and “sangue dormido,” to cite a few, have been found not to fit the categorization of mental illness proposed by the fourth edition of the North American Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000; see pp. 898-903 for a review). Another example is “agonias” expressed by Portuguese immigrants to Canada (James et al., 2005). The most recent version of the Diagnostic and Statistical Manual of Mental Disorders (5th ed., DSM-5; American Psychiatric Association, 2013b) has implemented a few strategies to decrease cultural bias in the classification of mental illness, such as the inclusion of culture-specific criteria within traditional diagnoses, an appendix expounding on cultural differences in the expression of distress, and an interview script to help clinicians consider the explanatory models that clients have regarding their difficulties as well as clients’ preferences for treatment modalities rooted in their cultural frameworks (American Psychiatric Association, 2013a).

Comprehensive works on psychopathology understand emotional difficulties in a multifaceted context in which culture plays a fundamental role (e.g., Pennington, 2002). Examples such as the ones presented above only start scratching the surface of the impact that culture has on the creation, conceptualization, experience, and expression of mental health and mental health difficulties. Paraphrasing S. H. Foulkes, Dalal (2000) stated that “there is no part of the psyche that is outside the social, and there never was a developmental moment that was
outside the social” (p. 49). This indivisibility of cultural and psychological realms highlights the inherent cultural nature of mental health to the extent that it is impossible to develop a truthful understanding of mental health and illness outside of their cultural underpinnings.

Given that mental health and emotional distress can only be understood in a cultural context, when several cultural contexts come into contact during acculturation, the individual and their environment play an important role in how mental health and emotional distress will be expressed, understood, and dealt with in the dominant society. Acculturation not only increases the complexity of mental health experiences, but it may also be a precipitating factor of many mental health difficulties. Acculturation involves losing ways of being that are integral parts of an individual’s life. Brown and colleagues (G. W. Brown, Harris, & Hepworth, 1995) contended that the connections between loss and depression are widely accepted. Among the losses involved in the process of acculturation are ways of thinking, feeling and behaving; loss of social and professional status; loss of a social network of friends and family; loss of a homeland, and loss of identity and self-worth (Arredondo-Dowd, 1981; Beiser, n.d.; Khan & Watson, 2005; Ward & Styles, 2003). As a result, some participants report feeling “sadness, depression, feelings of low self-esteem, [and] problems in their family life accompanied with certain health problems as a result of immigration” (Khan & Watson, 2005, p. 314).

Besides being connected with loss, depression has also been related to feelings of “helplessness, powerlessness and defeat brought about by [an] event” (G. W. Brown et al., 1995, p. 7). As part of the acculturation process, while engaging in the dominant culture, immigrants often find that their education, professional experience, and social and language skills are not immediately transferable to the dominant culture (Beiser, n.d.; Khan & Watson, 2005), preventing them from finding employment (Beiser, n.d.) and triggering feelings of worthlessness
and helplessness consistent with the symptoms of depression (American Psychiatric Association, 2000). Furthermore, the process of learning a new culture may also trigger feelings of stress, hopelessness, worthlessness, helplessness, and overall anxiety. For example, in the process of learning how to function in the dominant culture, individuals often must learn a new language and new codes of conduct, learn about effective job-seeking strategies, reconstruct a social network, and learn to navigate through the sea of systemic barriers (Arthur & Collins, 2005). Already vulnerable by the sense of loss, individuals may experience these challenges as overwhelming and become hopeless, anxious, and worried about their future, and enter a scenario similar to that of the ‘severe acculturative stress’ paradigm (Berry, 1997).

Acculturative stress is equivalent to any stress as a result of a major life transition: in this case, as a response to the process of acculturation (Sam & Berry, 1995, 2010).

Acculturative stress is an important concept to consider in the relationship between acculturation and mental health. Acculturative stress symbolizes the transition when adjusting to or integrating new system of beliefs, routines, and social roles throughout the process of acculturation and resettlement from one nation to another (Hovey & Magaña, 2000; Roysircar-Sodowsky & Maestas, 2000; Salgado, Castaneda, Talavera, & Lindsay, 2012). In the unidimensional model of acculturation, acculturative stress refers to instrumental and environmental stressors an immigrant experiences when first moving to a new, dominant culture: in this model, the level of acculturation is inversely related to degree of acculturative stress (Caplan, 2007). From the perspective of the bidimensional model of acculturation, acculturative stress includes other experiences of immigrants beyond the first generation including discrimination and loss of cultural values (Caplan, 2007). A certain amount of stress may be necessary or helpful for an individual to respond to a new situation; however, too much stress
can be problematic and can threaten healthy adaptation manifesting as uncertainty, anxiety, depression (Revollo, Qureshi, Collazos, Valero, & Casas, 2011), various forms of mental and physical maladaptation (Roysircar-Sodowsky & Maestas, 2000; Sam & Berry, 2010; Schwartz et al., 2010), and decreased quality of life (Salgado et al., 2012).

Hwang and Ting (2008) examined the impact of acculturative stress on the mental health of Asian-American college students. Using the Vancouver Index of Acculturation (a bidimensional measure of acculturation), the authors found that acculturative stress was a more proximal risk factor for mental health problems and psychological maladjustment independent of global perceptions of stress. A dimensional content analysis by Caplan (2007), which was also grounded in Berry’s bidimensional acculturation conceptual framework, revealed contextual factors that comprise dimensions of the meaning of acculturative stress from the perspective of Latinos of different ethnic backgrounds at various stages of acculturation. Dimensions of acculturative stress included instrumental and environmental stressors (e.g., financial, language barriers, lack of access to health care, unemployment, and lack of education), social and interpersonal stressors (e.g., loss of social networks, loss of social status, family conflict, and changing gender roles), and societal stressors (e.g., stigma and discrimination, legal status, and political and historical forces), which illustrates the complexities and diverse aspects of acculturative stress (Caplan, 2007).

Hopelessness, worthlessness, uncertainty, helplessness, worrying, anxiety, and stress that result from acculturation are all important symptoms that cut across many mental health difficulties such as depression, anxiety, and overall levels of stress. These difficulties have been the outcome of interest of other acculturation studies (e.g., Virta, Sam, & Westin, 2004).
A number of recent studies have investigated the relationship between acculturation and mental health. The literature has not been consistent, with many studies reporting a positive relationship between acculturation and mental health, while others have found a non-significant or negative influence (Abu-Bader, Tirmazi, & Ross-Sheriff, 2011; Chou, Wong, & Chow, 2011; Gonidakis et al., 2011; Jang & Chiriboga, 2010, 2011; Juang & Cookston, 2009; W. Kim & Chen, 2011; Madianos, Gonidakis, Ploubidis, Papadopoulou, & Rogakou, 2008; Masten et al., 2004; Sood et al., 2012; Yoon et al., 2012). Moreover, many studies continue to ground acculturation research in the unidimensional, linear model (Alizadeh-Khoei, Mathews, & Hossain, 2011; Gonidakis et al., 2011; Jang & Chiriboga, 2011) based on its perceived relevance to the population under study, as well as availability of brief and easily administered measurement scales (Gonidakis et al., 2011). Others have employed the bidimensional model, recognizing the complexity of acculturation and the need to contextualize it (Chou et al., 2011; Yoon et al., 2012).

Using multivariable regression and structural equation modeling, Miranda, Gonzalez and Tarraf (2011) assessed the association between acculturation and depression in an older Mexican-origin population in the southwestern United States using multiple proxies of acculturation including nativity, English proficiency, place of residence during formative years, and length of United States residence. No significant differences were found in the number of depressive symptoms as measured by the CES-D between native and foreign-born Mexican participants by level of English proficiency, by place of residence during formative years, and

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3 In the next several pages, whenever the word “acculturation” is used outside of the terminology of the bidimensional model, this implies that the unidimensional model was used by the study being reviewed; whereby “acculturation” is equivalent to the “assimilation” strategy in the bidimensional model.
length of United States residency after controlling for sex, age, marital status, socioeconomic
status, and health insurance status.

W. Kim and Chen (2011) had similar results in their exploratory investigation of factors
influencing depression in older Korean immigrants living in Canada. In their study, the two
proxy measures of acculturation: years of immigration and language proficiency, were not
associated with depression. Instead, social determinants including lower physical health status,
living alone, lower socioeconomic status, and low social activity predicted higher levels of
depressive symptoms. The authors proposed that acculturation factors, such as English
proficiency, may not cause stress for those living in metropolitan areas where there is a critical
mass of individuals from the same ethnic background (W. Kim & Chen, 2011) compared to
those in smaller cities (Jang & Chiriboga, 2010).

The studies by Miranda and colleagues (2011) and W. Kim and Chen (2011) are limited
because they do not situate the research or methodology in a particular theoretical framework or
conceptual model of acculturation (i.e., unidimensional vs. bidimensional); rather, they rely on
proxy measures of acculturation to make concluding arguments regarding the association
between acculturation and health outcomes. These proxy measures might not be in fact correlates
of acculturation in either of the acculturation models, which could explain the lack of
relationship between acculturation proxies and depression in these studies.

A number of studies have found a positive association between different aspects or forms
of acculturation and mental health outcomes (e.g., Asvat & Malcarne, 2008; Knipscheer &
Kleber, 2007; A. M. Miller et al., 2006). It is noteworthy that these studies indirectly use the
unidimensional model of acculturation. Therefore, when translated into the language of the
bidimensional model, their results indicate that being assimilated by the dominant culture (i.e.,
being acculturated) and in other instances being separated are protective factors to developing mental health problems. An example of such studies is the research that A. M. Miller and colleagues (2006) conducted using structural equation modeling to examine how acculturation is mediated through family, personal, and social network contexts to affect mental health status in a group of midlife immigrant women from the former Soviet Union. The authors utilized the Chicago Health After Immigration (CHAI) Framework. CHAI is an ecological framework where it is expected that acculturation will directly affect health outcomes and will be affected by numerous contextual and behavioural health status characteristics (e.g., personal, family, cultural, and social). A. M. Miller and colleagues (2006) found that higher acculturation, measured by the English Language and American Behavior subscales of the Language, Identity and Behavior Acculturation Scale, was indirectly related to lower depressive symptomatology (lower CES-D scores). Furthermore, modeling did not show a direct relationship between acculturation and depressed mood. Instead, higher acculturation promoted mental health indirectly by reducing social alienation and lowering family and personal stress, which directly affected symptoms of depression (A. M. Miller et al., 2006).

Similarly to Miller and colleagues, Knipscheer and Kleber (2007) examined the relationship between consequences of cultural adaptation or acculturation and psychological distress and mental health in clinical and community-based samples of Ghanaian migrants in the Netherlands. Overall, acculturation level measured by the Lowlands Acculturation Scale was not a strong predictor of mental health; however, specific domains of the acculturation process were associated with subjective health state and well-being as measured by the General Health Questionnaire. Strong affiliation with heritage cultural traditions was associated with good health; feelings of loss about one’s country of birth and a greater orientation towards those with
the same cultural background, however, were associated with a higher level of health symptoms (Knipscheer & Kleber, 2007). This echoes Asvat and Malcarne (2008) who found that Muslim university students with a strong identification with heritage culture may experience a psychosocial environment that is protective from depression symptoms, and certain aspects of Muslim culture, such as extended family and community networks, may buffer Muslims’ vulnerability to depression (Asvat & Malcarne, 2008).

Various studies discussing the negative impact of acculturation on mental health have used language as a primary indicator of acculturation. For example, in a study using composite measures for acculturation, Alizadeh-Khoei, Mathews and Hossain (2011) found that Iranian immigrants living in the Sydney Metropolitan area who did not speak English at home were more likely to have psychological distress and greater limitations in physical functioning. Furthermore, Iranians with better English proficiency were more likely to access healthcare services and had lower levels of symptoms for anxiety and depression. Jang and Chiriboga (2011) found that acculturation (represented as a unidimensional inventory of language proficiency, frequency of language use, and food consumption) and social activity were significant predictors of depressive symptoms after controlling for demographic and health-related variables.

In a prospective cohort study, Chaudry, Husain, Tomenson and Creed (2012) found that persistence of depression in Pakistani women in the United Kingdom was also independently predicted by acculturation variables, particularly less familiarity with the English language and the sense that “Pakistan is home,” which highlights the importance of social isolation and social difficulties in the acculturation-mental health dynamic (Chaudhry et al., 2012). It appears that
particular symptoms or qualities generated by acculturation may become the early signs of psychological problems to watch for when it comes to immigrants undergoing acculturation.

With the exception of Asvat and Malcarne (2008), although the studies referenced above demonstrate the relationship between acculturation and mental health, they were based on the unidimensional model that equates acculturation to ‘assimilation’ to the dominant culture. Furthermore, several of these studies measured acculturation based on proxies and indicators such as language proficiency. Approaches to acculturation measurement utilizing attitudes and appraisals are described below.

Studies based on Berry’s bidimensional model (Berry et al., 1989) describe the relationship between each acculturation strategy and the incidence of mental health difficulties. Integration, also referred to as biculturalism in the literature (Benet-Martínez & Haritatos, 2005), seems to be the preferred strategy across various studies (Berry & Sam, 2003; Neto, 2002). Researchers have indicated that Integration is often the most effective strategy for good psychological adaptation (Berry, 1999, 2003; Berry & Sabatier, 2010; Sam, 1994), beneficial psychological outcomes, intellectual development, and subjective well-being, especially among young immigrants (Coatsworth, Maldonado-Molina, Pantin, & Szapocznik, 2005; David, Okazaki, & Saw, 2009). The benefits of Integration have been found also when migration is internal (e.g., moving from rural to urban areas within the same country). For example, Integration was the best strategy for promoting well-being in a sample of Chinese workers who migrated from rural to urban areas (Gui, Berry, & Zheng, 2012). Integration is also associated with better overall adjustment as demonstrated by resolved acculturative stress, higher self-esteem, lower depression, and prosocial behaviours (Chen et al., 2008; Fassaert et al., 2011; E. Kim, 2009; Schwartz & Zamboanga, 2008; Yoon et al., 2013). Integration is seen to be closely
associated with good psychological adaptation because it implies that individuals have double competence to cope with cultural transitions and are able to access resources from both the non-dominant, heritage culture and the new, dominant culture (Sam & Berry, 2010). Furthermore, maintenance of one’s heritage culture and identity coupled with improving mastery of the dominant language may improve mental well-being and functioning of migrants (Fassaert et al., 2011).

Assimilation has been found to be associated with lower levels of depression when compared to integration (e.g., Oh, Koeske, & Sales, 2002). Other studies have shown the association between marginalization scores and higher levels of psychological symptomatology (e.g., Neto, 2002), depression (Choi, Miller, & Wilbur, 2009; E. Kim, 2009) and negative mental health (Yoon et al., 2013) as the risks of adaptation difficulties are greater with little cultural competency and lack of support from any cultural group (Sam & Berry, 2010).

Despite generalized statements regarding trends in the links between acculturation and mental health, many studies show that these relationships may display different nuances according to ethnic group. For example, Hwang and Ting (2008) found that being less identified with mainstream United States culture, as measured by the bidimensional Vancouver Index of Acculturation, was associated with increased psychological distress and risk for clinical depression amongst Asian American college students. Miller and colleagues (2012) also found that belonging to the separation cluster in a large Asian American sample was associated with worse mental health. Conversely, other studies found that an ethnic orientation was conducive to good psychological adaptation (e.g., Obasi & Leong, 2009; Torres, 2010). Obasi and Leong’s (2009) study with African Americans found that psychological distress was lower in participants
who exhibited a traditionalist acculturation strategy compared to participants with an integrationist acculturation strategy as measured by the bidimensional scale Measurement of Acculturation Strategies for People of African Descent (Obasi, 2005). Torres (2010) investigated the relationship between acculturation, acculturative stress, coping, and membership into low, medium, and high groups of depression as measured by the CES-D in Latino adults in the Midwestern United States. Similar to the findings of Obasi and Leong (2009), this study found that depression scores were not significantly correlated with income, generation level, years in the United States, acculturation (measured using the bidimensional Acculturation Rating Scale for Mexican Americans-II), or acculturative stress (measured using the Multidimensional Acculturative Stress Inventory). Compared to the ‘low depression’ group (i.e., scores less than 16 on the CES-D), the ‘high depression’ group (i.e., scores of 24 or higher on the CES-D) endorsed an orientation to the mainstream culture of the United States of America (U.S.A.), less Latino cultural orientation, and increased English competency pressures. These results suggest that connection to the Latino culture acted as a buffer for those experiencing moderate depressive symptomatology (Torres, 2010), corroborating other studies whereby upholding heritage culture is advantageous (Berry, 2006).

The relationship between acculturation and immigrant mental health is a complex one and may differ greatly between different ethnic groups (Dey & Lucas, 2006; Taloyan et al., 2011). For example, previous studies found that the integration strategy is often the preferred strategy for acculturating Hispanic youth (Berry & Sam, 2003; Coatsworth et al., 2005; Sullivan et al., 2007). Schwartz and colleagues (2010) proposed that the cultural or ethnic background of migrants is an important determinant of the acculturation process due to a number of factors.

\[4\] Although this research was grounded in the bidimensional model of acculturation, the authors did not situate this
including perceived discrimination. Stronger adherence to one’s own culture in response to oppression and to cope with discrimination (Schwartz et al., 2010) may help to explain the findings by Obasi and Leong (2009) and Torres (Torres, 2010). Furthermore, Schwartz and colleagues argue that the role of national, ethnic, and local contexts on the acculturative process and their relationship with psychosocial and health outcomes cannot be ignored. Berry has also highlighted that since acculturation occurs because of the contact between two or more cultures, the receiving culture’s characteristics, such as receptivity to cultural diversity and discrimination, will affect how immigrants adjust to their new realities and how much stress the adaptation process will generate (Berry, 2003; Sam & Berry, 2010).

Based on the premise that ethnic differences may greatly influence outcomes of acculturation research, investigators have started to place more attention on this variable resulting both in the identification of gaps in the literature as well as recommendations for future research. For example, numerous acculturation researchers have highlighted that current literature investigating acculturation and mental health has focused on Latino and Asian migrant communities in the U.S.A. (Schwartz et al., 2010; Yoon et al., 2011). In a recent meta-analysis of 325 studies, Yoon and colleagues (2013) found that 43.7% of participants were Latin American, followed by Asian American (36.3%) and African American (10.2%). Investigators have recommended that future research should explore the interaction between unique characteristics for various racial/ethnic groups and acculturation processes with an expansion of the literature to include European, African, and Native migrant communities (Schwartz et al., 2010; Yoon et al., 2011).

finding relative to Berry’s acculturation strategies of marginalization or separation.
In response to the lack of research investigating acculturation and its measurement in people of African descent (e.g., African Americans), Obasi and Leong (2010) sought to construct and validate a bidimensional measure of acculturation strategies for this cultural group. Currently, there is a dearth of research exploring acculturation strategies and psychological outcomes in the Brazilian immigrant community in Canada, which will be explored in the present study. To assume that the acculturative experiences of Brazilians are similar to those of Latinos/as or of other Latin American individuals might be problematic (see subsection ‘Brazucas?’ of this chapter regarding the controversies around the categorization of Brazilians as Latinos/as).

**Acculturation strategies and mental health outcomes: Recent methodological developments**

Despite having been widely used and explored in numerous acculturation studies with various ethnic groups, the validity of Berry’s bidimensional model has been questioned by some researchers (Benet-Martínez & Haritatos, 2005; Rudmin, 2003, 2006; Schwartz & Zamboanga, 2008). Challenges to Berry’s bidimensional model have included implausibility for the marginalization acculturation strategy. Scholars have argued that immigrants would not develop an identity dissociated from elements of both culture of origin and dominant culture (Del Pilar & Udasco, 2004; Rudmin, 2003; Schwartz & Zamboanga, 2008). In addition, researchers have suggested that acculturation strategies will vary from population to population and that some of Berry’s categories may not be found in a given population or may have multiple subtypes (Schwartz et al., 2010; Schwartz & Zamboanga, 2008). For example, multiple types of biculturalism have been identified, suggesting that Berry’s integration acculturation strategy may be represented as a number of subcategories (Benet-Martínez & Haritatos, 2005). Finally,
Ferguson and colleagues (2012) suggested that the bidimensional model does not capture the possibility of multiple cultures of origin or destination.

Berry has responded to some critiques suggesting that the integration acculturation strategy may take various forms: for example, alternation between cultural ways or a merging or blending of the heritage and dominant cultures (Berry, 2009). He has also acknowledged the role that the socio-political context has in the acculturation process and that some intercultural combinations might pose different challenges due to the unwillingness of the dominant culture to be open to cultural diversity in all of its forms (Berry, 2008, 2009). Power relations are the reason Berry put forth to explain the plausibility of the marginalization strategy. He suggested that “enforced cultural loss” combined with exclusion and discrimination results in decreased interest in both non-dominant and dominant cultures (Berry, 2008, p. 331).

In an attempt to comprehensively evaluate and provide empirical support for Berry’s bidimensional model, recent studies (including some of those mentioned above) have employed a variety of statistical techniques including cluster and latent class analyses (Berry et al., 2006; Choi et al., 2009; Schwartz & Zamboanga, 2008; Tahseen & Cheah, 2012) to empirically extract acculturation strategies from the study population and continuous indices of acculturation, and determine the variance that exists in the sample (Tahseen & Cheah, 2012).

Miller and Lim (2010) and Miller and colleagues (2012) have made a significant contribution to the advancement of the study of acculturation strategies. For example, Miller and Lim (2010) have proposed within-person variability in acculturation strategies depending on the circumstantial domain: for example, utilizing separation strategy within a values domain or utilizing the assimilation strategy in a behavioural domain. Miller and colleagues (2012) tested this idea in relationship to mental health outcomes and help-seeking behaviour in three Domain-
Specific Acculturation Strategy cluster analyses with Asian American participants. Overall, 67% to 72% of participants across three independent samples used different acculturation strategies for behavioural and values domains, and about a third of participants used the same strategy regardless of the domain (M. J. Miller et al., 2012). It was proposed that those with higher bicultural identity, that is, those who employ the integration acculturation strategy, can integrate both cultures into their daily lives and shift back and forth between different acculturation strategies depending on the circumstance. Miller and colleagues (2012) also argued that individuals who subscribe to strategies that supposedly exclude one or both cultures (i.e., assimilation, separation, and marginalization) do not necessarily have an absence of engagement with those cultures; rather, they engage to a lesser extent. These findings and reflections highlight the complexity of the acculturation process and support Berry’s notion that acculturation is dynamic and nuanced (Berry & Sam, 2003; M. J. Miller et al., 2012).

Study findings have been variable depending on how acculturation was conceptualized and the participant characteristics such as age and ethnic background (Yoon et al., 2013). It should be noted that conflicting results regarding the relationship between specific strategies and mental health outcome may not only reflect the complexity inherent in the acculturation-mental health relationship, but may also result from a wide variety of methods used for evaluating this relationship across quantitative studies (Miranda et al., 2011). As most studies have used a cross-sectional or correlational study design, the interpretation of the directional relationship between acculturation and mental health has been challenging. Furthermore, as previously mentioned, a variety of proxies have been used to measure acculturation: for example, nativity, language use, and place of residence during formative years, all of which are independent constructs that may affect health outcomes in different and unrelated ways (Miranda et al., 2011). The present study
utilized a previously validated measure to assess acculturation strategies rather than using proxies. Quality of life, including history, concept, and strategies used to measure it, are reviewed next.

**Quality of life**

**History of quality of life research and application.**

The study of quality of life (QOL) has received continued interest in the research community. Various authors mention that online searches on the term QOL yields a large number of publications (e.g., Haas, 1999a; Schalock, 2004; Shek, Chan, & Lee, 2005). Why has QOL sparked such growing interest? What is so enticing about QOL?

According to Armstrong and Caldwell (2004), issues around QOL emerged from a socio-political transformation in Western society. An increased focus on social issues in the political and healthcare arenas found in QOL a common denominator upon which to gauge the extent and effectiveness of change. Whatever social changes would occur would only be considered meaningful if they had produced important changes in QOL. Authors have argued that “quality of life asserted the very meaning of life against the non-human forces social change had unleashed” (Armstrong & Caldwell, 2004, p. 369). In the medical field, QOL followed the movement away from symptom reduction or the dichotomous ways of life and death as indicators of treatment success, to a qualitative gradient between the two extremes. QOL became the unifying concept to measure whether progress, as it is defined in the West, was being achieved and allowed a common language and parameters for communication between social, political, and healthcare fields (Armstrong & Caldwell, 2004). As a result of these debates, QOL became a critical part of health and social policy in this century (Armstrong & Caldwell, 2004).

In a review of the evolution of QOL studies, Bognar (2005) pointed that QOL initially
developed from two branches: social welfare and individual welfare. Up to the late 1960s, social welfare had been traditionally measured through economic indicators. This approach was profusely questioned by the social indicators movement in the early 1970s, which argued that social factors associated with economic indicators would provide a more accurate portrait of an individual’s welfare in a particular society. Methodological issues in the research of social indicators gave rise to the study of Quality of Life (Bognar, 2005), which became concerned specifically with studying and measuring welfare. The QOL branch of social indicators movement also proposed that the objective indicators, that is, those tangible factors that could be statistically measured, such as housing, availability of health care services, and per capita income, were insufficient to assess an individual’s quality of life. Proponents of this movement disputed that a subjective appraisal of one’s objective life conditions should integrate measures of welfare and that this subjective appraisal should convey the importance of those objective factors in one’s life (Bognar, 2005). In the 1960s, QOL research had a focus on observable and measurable components such as SES, symptoms, and functional status. However, psychological research, in the 1970s, found that these aspects contributed only 15% of the variance in QOL, while subjective factors accounted for over 50% of the variance in QOL (Day & Jankey, 1996). Influenced by this kind of research, the field began to conceptualize individuals’ perceptions in terms of happiness or satisfaction with life. These two terms began to be used interchangeably.

Since the 1970s, two main issues have been fueling debates in the field of QOL: first, the issue of objective versus subjective indicators continued, and second, the issue of equating welfare, well-being, and satisfaction with life with the concept of QOL was raised. Haas (Haas, 1999a, 1999b) has proposed a model in which she teases out these terms and includes them in an integrative model of quality of life. Bognar (2005) proposes that objective indicators be
understood as “descriptive” indicators in order to contrast them against the evaluations of individuals regarding the same indicators.

In the midst of the QOL discussion in the social realm, the movement entered the healthcare system and gathered the attention of healthcare providers and researchers, which helped fuel the above debates. The advent of QOL research in healthcare resulted from various reasons: With the evolution of new technologies and treatments, our society has experienced an increase in life expectancy, a reduction in mortality, and an increase of diagnosable chronic conditions (Moons et al., 2006; Schalock, 2004). New equipment and cures to health conditions have extended the life of at-risk populations. The question became whether it was worth living longer if the quality of life was poor. Therefore, symptom-based outcome assessment of various treatments became insufficient to assess the validity and efficiency of care. QOL became a critical component to healthcare outcome assessment (Armstrong & Caldwell, 2004; Frisch, 2004) and re-humanization of healthcare treatment (Haas, 1999a). This change was demonstrated through the development of models of person-centred care, which placed an increasing focus on the individual (“consumer empowerment”), individuals’ benefits, self-determination, and the need to hear the patient (Armstrong & Caldwell, 2004) within treatment settings. QOL quickly became “the arbiter of medical goals and clinical success” (Armstrong & Caldwell, 2004, p. 369).

Quality of life became so central that authors have asserted that the goal of any healthcare intervention, including mental health, is to improve clients’ quality of life (Frisch, 2004). In psychology, this movement has seen a shift from focusing on the DSM disease and medical model to investing what matters the most: having a good life. According to Frisch (2004), QOL assessment rejects the concept of health as absence of symptoms. The author proposes that not
feeling bad does not equate to feeling good. QOL research and interventions allow us to improve even the lives of those who have an overall good life. In such a case, the goal becomes to increase quality of life in areas where one’s satisfaction is lacking and using those areas in which they are satisfied as strengths that will help enhance their overall QOL. To this end, QOL approaches have a close relationship or at least good compatibility with the positive psychology theory and, for this reason, it has extensive applicability in non-clinical settings as much as it has in work with clinical populations (Frisch, 2004).

**Concept of Quality of Life.**

Researchers of QOL suggest that most people have a general common sense understanding of QOL: for example, as “goodness of life”, and being able to live successfully and happily within our environments” (R. I. Brown & Brown, 2005, p. 720). Even though QOL is a term used widely by professionals, scholars, and lay individuals alike, it is clear that the ideas behind the concept vary as widely as its use (Frisch, 2004; Haas, 1999a, 1999b; Moons et al., 2006). At times, research papers simply do not present the QOL definition on which they are founding their finding or comments. Other times, the definition is unclear. For example, QOL has been defined as its domains (income, interpersonal relationships, etc.), or as a synonym of well-being or satisfaction with life (Haas, 1999a, 1999b). Furthermore, multiple definitions and the lack of agreement on one common conceptualization of QOL makes it difficult to compare research results (Haas, 1999a).

Haas has proposed a differentiation between well-being, satisfaction with life, and functional status (Haas, 1999a) and presented these as components of QOL. The author conceptualized satisfaction with life as the subjective component of QOL (Haas, 1999a). Given the increasing focus on the individual in the healthcare system, there is a growing tendency
toward conceptualizing quality of life as satisfaction with life, especially in the field of psychology (Frisch, 2004). According to Frisch (2004), satisfaction with life is less unstable than affect (often equated with subjective well-being) and behaviour (functional status), which are considered other elements of QOL. This position has been endorsed by Moons and colleagues (2006). The authors conducted an evaluation and critique of various QOL conceptualizations and concluded that “defining quality of life in terms of satisfaction with life is most appropriate” (p. 899).

The arguments that evaluation alone is sufficient to measure QOL are several. Bognar (2005) has noted that, currently, the prevalent view is that evaluations should integrate QOL measures. The concept of quality of life undeniably involves an evaluation. The word *quality* elicits ideas such as poor, good, or excellent, which are appraisals of an attribute. Stating that something has poor quality implies that one: (a) knows what good quality is like or at least has an expectation about it, and (b) compares these notions with their current status. The inherent evaluative component of QOL has led some authors to propose that QOL refers more to the individual’s perception of their life conditions than to the objective life conditions in which they live (Moons et al., 2006). This position is supported by Day and Jankey’s (1996) argument that evaluations account for over 50% of QOL scores while objective indicators account for only 15% of the variance. Furthermore, discrepancies between individuals’ evaluations and proxy evaluations lead to a further argument that only the individual can provide a reliable account of their QOL (Moons et al., 2006). There are, however, problems with these conclusions that are of a methodological and political nature.

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5 The view of QOL as primarily satisfaction with life motivated the expansion of Costa’s research (Costa, 2008a, 2008b), since it found that the Satisfaction with Life in Canada Index explained a significant variance in respondents’ acculturation strategies and levels of depressive symptomatology.
Some consensus has been reached in the literature that quality of life links with subjective well-being and represents an individual’s perceived overall satisfaction and happiness (Vohra & Adair, 2000; Wong, Chou, & Chow, 2012; J. Zhang, Li, Fang, & Xiong, 2009). From a methodological point of view, however, it is incorrect to say that QOL is purely subjective based solely on the finding that individuals’ evaluations account for more variance of final scores. They may account for more; however, they do not account for all of the variance. As such, the other aspects of QOL also warrant investigation. From a political perspective, to say that QOL is purely subjective raises questions about oppression. For example, an individual who has been in a socially oppressive situation may evaluate their quality of life as adequate since they do not know about other possible realities or because they have been coached in terms of how to perceive their life conditions. It is questionable whether in oppressive situations individuals would have a clear enough idea of what is humanly acceptable in terms of living conditions. This view, in turn, raises questions about whether Western scholars hold any truths about what is good for whom. To resolve this conundrum is not the objective of this review. However, it is important to keep issues of methodology and oppression in mind when evaluating different models of QOL. Some researchers have attempted to include the social context in which individuals make QOL evaluations in order to understand their appraisals contextually. One such example is proposed by Renwick and colleagues (Renwick, Brown, & Nagler, 1996). The authors created a scale that surveys individuals on their perception of control and opportunity within their socio-cultural context as a way of controlling for environmental effects on their QOL answers.

Based on the above reflection, it seems that the definition of quality of life proposed by the Quality of Life Research Unit, in the Centre for Health Promotion, University of Toronto,
directed by Rebecca Renwick (see Renwick et al., 1996) captures important aspects that are compatible with the critical view of culture and power relations that informs the present study. Their research unit defines quality of life as “the degree to which a person enjoys the important possibilities of his or her life” (Quality of Life Research Unit, n.d.). This concept will be further explained in the next section.

**Models of quality of life assessment.**

Of the two predominant conceptualizations of QOL, that is, the one based on objective factors and the other focused on the subjective aspects of QOL, the latter is the conceptualization predominantly adopted by social science, psychology, and para-medical sciences, such as occupational therapy and rehabilitation sciences (Atkinson, 1996). Within the subjective conceptualization, many models have been proposed. Although these models differ in several aspects, they also feature numerous commonalities. For example, it is generally accepted that (a) QOL comprises subjective and objective components (though this might not be assessed directly) (e.g., Frisch, 2004; Haas, 1999a, 1999b); (b) QOL is assessed throughout domains; and (c) each domain is divided into indicators (Renwick et al., 1996; Schalock, 2004; Schalock et al., 2005).

Based on his work and a review of the work of many researchers in the QOL field, Schalock (2004) has proposed that any QOL model should be founded on the following principles: QOL is a multi-element framework (multiple domains), individuals are experts on their needs (subjective evaluations), and any combination of domains should reflect the global QOL (final QOL scores are the combination of domain-specific scores). In his review of the literature, Schalock (2004) compiled a list of QOL indicators that were grouped in eight core domains, namely emotional well-being, interpersonal relations, material well-being, personal development, physical well-being, self-determination, social inclusion, and [human] rights.
Another main principle that has been put forward by other researchers is the paramount role of importance ratings for obtaining a complete picture of QOL. Traditionally, only satisfaction had been assessed; however, this provided a distorted assessment of one’s QOL as it assumed all domains to have the same relevance for all persons. An example of this distortion would be if two individuals were assessed across five domains. They would have rated their satisfaction in each domain differently; however, their final QOL scores would be the same (i.e., the sum of the ratings for each domain). Although these two individuals would have the same final scores, the domain-specific ratings would have likely indicated a significantly different experience not captured by satisfaction ratings alone. The inclusion of importance and satisfaction ratings is perhaps the most fundamental principle of current QOL research. This inclusion makes it possible to reveal the power relations surrounding one’s evaluations and therefore the social influence these evaluations may engender. Without measuring subjective importance and satisfaction evaluation of indicators, all we would have would be numbers with little and weak meaning. Bognar (2005) summarizes QOL researchers’ understanding about subjective evaluation and importance ratings with the following excerpt:

... the gathering of evaluations gives an opportunity to citizens to shape the political process by providing a way to voice their concerns and reveal their demands; ... data on evaluations are essential for policy success and securing public support for policy objectives; and ... quality of life measures based on evaluations can avoid paternalism in the design of institutions and policies (p. 565).

In the area of psychology, descriptive indicators would certainly fall short of any meaningful use of QOL measurements. Irrespective of what psychological approach one chooses to follow, the importance of meaning is at the core of human suffering, change, and healing
(Beck, Rush, Shaw, & Emery, 1979; Elliott, Watson, Goldman, & Greenberg, 2004; Yalom, 1980). It is no surprise, therefore, that QOL research in the field of psychology focuses primarily, if not exclusively, on individuals’ perceptions of their QOL (Frisch, 2004; Graham, 2008). Descriptive indicators may integrate a QOL model as a guideline that inform the evaluation process (Bognar, 2005). In terms of affect considerations (e.g. happiness) in QOL, perceptions or satisfaction with life evaluation are more stable when compared to fluctuation in mood frequently related with happiness/subjective well-being (Frisch, 2004). According to Frisch (2004), the choice of satisfaction is also one that reflects the goals for the measurement of QOL, which are primarily intervention planning and outcome assessment. Within this context, an intervention goal of sustained happiness is less realistic than increase in satisfaction. Based on the principles listed above, two QOL models seem to be appropriate for this study: the model proposed by Frisch (2004) and the model developed by the Quality of Life Research Unit at the Centre for Health Promotion, University of Toronto (Quality of Life Research Unit, n.d.). A brief description of the two models is presented below.

Frisch (2004) developed a QOL theory that combines subjective and objective factors within a framework of positive psychology and cognitive behavioural therapy. The author divides these factors into first and second order factors. The first order factor refers to the construct of satisfaction with life proposed by positive psychology, which implies the subjective appraisal of one’s satisfaction with life conditions. The second order factor refers to objective elements, such as actual life and functional status. Therefore, Frisch’s theory combines both objective and subjective factors and has a major assumption that satisfaction with life, i.e., the cognitive appraisal of objective life conditions, is the most significant representation of one’s QOL. Frisch developed a measure called Quality Of Life Inventory (QOLI) that is comprised of
16 items, each representing the 16 main areas of life or domains empirically supported by research. Respondents rate both the importance and the satisfaction within each area. The final score is weighed according to importance scores. Only non-zero importance scores are included in the global QOL score. The QOLI also contains a space next to each item for respondents to comment on the limitations and interferences they experience in each domain (Frisch, 2004).

The QOL model developed at the Centre for Health Promotion, University of Toronto (Renwick et al., 1996) (QOLP) was not originated in psychological research; however, it has been developed within a health promotion context and highly influenced by psychological theory. The QOLP assesses QOL across three domains and nine areas of life (three per domain). Each area of life contains six indicators for a total of 54 items. Each item is assessed according to importance and enjoyment (satisfaction). Respondents also rate perceived control and opportunities associated with each area of life. The measure yields scores per domain and area of life. Global scores are weighed based on importance ratings, thereby reflecting qualitative differences in area of life scores. The scores for control and opportunities do not integrate the global score. Rather, they provide the social background against which to understand the results.

The QOLP seems to satisfactorily capture the theoretical framework of the present study in that it is compatible with a critical conceptualization of culture, acculturation, and mental health within a context in which societal power relations and oppression play an important role. The fact that the QOLP is based on importance and satisfaction ratings increases the cross-cultural applicability of the instrument. For example, if an item or domain is culturally irrelevant for an individual, this would be represented by choosing the lowest importance score, which in turn would be reflected in the final score. In addition, since the QOLP focuses mainly on the
individual’s perceptions and evaluations, it is possible not only to be used with different cultures, but also to make intercultural comparisons. A detailed review of the cultural underpinnings of QOL and the relationship between QOL and acculturation is the focus of the next section.

Quality of life, culture, and acculturation

Cultural variations of quality of life.

Quality of life is a cultural concept (Renwick et al., 1996). It is cultural because of the socio-historical context in which its study and experience take place. Such context values personal empowerment, client-centred care, and social justice. Quality of life is highly political and at the centre of social policy initiatives. Brown and Brown (2005) contend that QOL has its origin in critical societal ideas such as “social role valorization, anti-discrimination practices and rights, and inclusion” (p. 718). Given this context and the premise that there is no real separation between the individual and their socio-cultural context, it follows that QOL statements and evaluations should be understood as subjective evaluations by an ‘individual-in-context.’ The subjective evaluations are provided by the individual; however, they are co-constructed in a socio-cultural context. Based on this principle, it is reasonable to assume that quality of life evaluations vary across different cultures.

In search for cultural influences in QOL evaluations, Schalock and colleagues (2005) conducted cross-cultural research of QOL in five geographical areas located across four continents. Respondents were 2,042 individuals with intellectual disabilities, their family members, and professionals serving that community. They were presented with a list of QOL

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6 The authors do not employ an acronym to describe their model, therefore the abbreviation QOLP is provided by this author in order to improve readability.

7 According to Bognar (2005), it is impossible to compare global quality of life scores when they are a result of descriptive indicators across various domains as they are the summation of “apples and pears” (p. 565). However, level of satisfaction is a common denominator across the domains and as such may be compared.
domains and indicators and were asked to rate the importance of the indicators in their lives and how frequently they were taken into consideration or used in the services received or provided. Factor analysis showed that respondents attributed similar importance to the eight domains, suggesting universality. The survey found that QOL domains were similarly important across geographical location (etic perspective); however, the frequency of each ranking category varied across geographical location (emic perspective), suggesting that there may be variations associated with geographical groups. The main conclusion drawn from the study results was that QOL has emic or culturally-bound (degree of importance) and etic or universal (domains) aspects. More often, Spain and Latin America endorsed higher ratings (i.e., ‘4’), followed by the U.S.A., and Canada, with China presenting an almost equal distribution between ratings ‘3’ and ‘4’. Despite eliciting an important discussion about universality of QOL, the study conducted by Schalock and colleagues (2005) had confusing aspects. First, it did not define QOL; it only defined it by the enumeration of its domains and then claimed universality. Second, it equated culture to geographical location, which may imply confounding factors not accounted for in the study design. Theoretical and methodological limitations such as the ones found in the study conducted by Schalock and colleagues render the scarce literature on culture and quality of life questionable.

Other authors have demonstrated culturally bound differences in QOL evaluation. For example, many Hispanic Americans’ conceptualizations of health and quality of life may be related to their ability to engage in employment (Clingerman, 2006), which indicates that their QOL appraisals might be heavily influenced by the combination of importance and satisfaction ratings on that domain. There is also evidence to show that quality of life measures, including the SF-36 and EORTC QLQ-C30, are subject to differential item functioning across language and
ethnic groups, and that the use of differential item analyses may be warranted when evaluating QOL scales across cultures (Avis & Colvin, 2007; Bjorner, Kreiner, Ware, Damsgaard, & Bech, 1998; Pagano & Gotay, 2005). This concept relates to the idea that answers to individual items on a scale should be similar for individuals with similar scores on the scale regardless of other sociodemographic factors including age, gender, ethnicity, culture, or country of origin. If this does not occur and variability in scores are observed (i.e., differential item functioning), conceptual differences across translations and cultures may be to blame (Avis & Colvin, 2007).

Based on a review of numerous studies that investigated areas of life associated with happiness and life satisfaction, Frisch (2004) contended that areas of life or human concerns (QOL domains) are common to all individuals; however, the importance attributed to each of these human concerns varies from person to person. In order to demonstrate variations in importance ratings according to rater, the author presented an example based on how stages of life may influence importance rating. Taking this example further, importance evaluations may vary according to cultural values and multiple identities. For example, spirituality, work, and interpersonal relationships are generally assumed to be part of people’s lives around the world. However, two individuals who share gender, physical ability, social class, and ethnic elements of their identities may vary in the spirituality identity. For example, supposing that one of the individuals is agnostic and the other is Buddhist, their evaluation of the importance of spirituality in their lives will likely be quite different. Another example of universality and variability has been put forward by Brown and Brown (2005). The authors presented social connection as a universal value that may be operationalized in various ways such as a large group of friends, few close friends, or closely knit family relationships. These variations may be a result of the

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8 For example, a young adult climbing the career ladder and a retired person may value work differently.
combination between personal and societal values and will likely be different when evaluated by persons from collective and individualistic societies. Examples such as those presented above support the idea put forward by Schalock and colleagues that QOL has etic (universal) and emic (culturally-bound) aspects (Schalock, 2004; Schalock et al., 2005).

Cultural differences may be captured by QOL measurements that have separate scales for importance and satisfaction. For example, if an indicator or domain is not important for a respondent, then they may rate it as ‘not at all important.’ Furthermore, when this response is weighed against the satisfaction rating for the same indicator or domain, it will impact the final domain-related score and global QOL score. Increasing research has been published exploring correlates of quality of life in immigrant populations. Immigrant quality of life has been correlated with a number of demographic and psychosocial characteristics including age, gender, marital status, education, low socioeconomic status, psychosocial resources, and social support (Lim, Yi, & Zebrack, 2008; Ribas & Lam, 2010; Thoman & Suris, 2004; J. Zhang et al., 2009). For example, Ribas and Lam (2010) found that having better quality of social support, being male, and being younger were associated with higher quality of life among Latinos with mental illness from a community mental health center.

**Acculturation and quality of life.**

Based on the understanding of QOL as a cultural concept, it is reasonable to expect that when diverse cultural backgrounds come into contact, as in the case of acculturation, this will have an impact on the QOL of individuals and groups affected by the intercultural contact. Unfortunately, the literature on acculturation and quality of life is limited (e.g., Lang, Munoz, Bernal, & Sorensen, 1982; Lim et al., 2008; Thoman & Suris, 2004). Many articles use acculturation as a moderating and one-dimensional variable, such as level of acculturation (Lang
et al., 1982; Schwartz et al., 2010), which is incompatible with the bidimensional model proposed in the present study. Many of these studies are developed in the healthcare field or a health-related QOL field (e.g., Lang et al., 1982; Lim et al., 2008). Few articles target the relationship between acculturation and QOL as the main variables to be investigated (e.g., Thoman & Surís, 2004). Some of them assess only health-related QOL in specific patient populations (e.g., Lim et al., 2008; Thoman & Surís, 2004).

One study by Lim and colleagues (2008) targeting Korean immigrant women in the United States who were breast and gynaecological cancer patients found that QOL was indirectly predicted by acculturation. This study used the Asian American Multidimensional Acculturation Scale (AAMAS) to measure acculturation level using a multi-linear format whereby study participants respond to items according to three reference groups: (a) their culture of origin (Koreans); (b) other Asian Americans; and (c) European Americans. Furthermore, birthplace, primary language/language barriers, and length of stay in the United States were assessed as proxy measures of acculturation. Similarly, Jadalla and Lee (2012) used the SF-36 to assess HRQOL and its relationship with acculturation and perceived health status among Arab Americans in southern California. One of the strengths of this study was the use of factor analyses to generate one factor regarding ‘Attraction to American culture’ and another factor regarding ‘Attraction to Arabic culture’ out of data from the Acculturation Rating Scale of Arab Americans-II. This scale was based on the Acculturation Rating Scale of Mexican Americans-II (or ARSMA-II), which aligns with Berry’s bidimensional model of acculturation. Participants with higher attraction or assimilation to American culture had significantly better mental health summary scores and those with bicultural identification had better physical health summary scores as measured by the SF-36 scale (Jadalla & Lee, 2012). Yoon and colleagues (2012) tested
a conceptual model of acculturation and subjective well-being using survey data from Asian American college students and structural equation modeling. The effect of acculturation on subjective well-being was mediated by social connectedness to mainstream and ethnic communities and expected social status.

Given the impressive ascendance of QOL in multidisciplinary contexts, the growing blurring of cultural boundaries witnessed in the past few decades, and researchers’ clear preference for the bidimensional model of acculturation, it is surprising that the intersection between QOL and the bidimensional model of acculturation has not been more extensively explored within academic and social research. Even though the research on QOL and the bidimensional acculturation model is limited, there are a number of studies in which the unidimensional model is used, oftentimes associated with HR-QOL.

Janz and colleagues (2009) demonstrated that racial/ethnic differences in quality of life existed between white, African American and Latina women after a diagnosis of breast cancer. This study used the unidimensional Short Acculturation Scale for Hispanics (SASH) to determine language preference for Latina women. Regression modeling found that Latina women with lower acculturation scores had worse QOL when compared to white women and Latina women with high acculturation scores. This study also indicated that age moderated the relationship between race, ethnicity, and acculturation and QOL (Janz et al., 2009).

Yang and Wang (2011) used the SF-36 to measure health-related quality of life in Vietnamese immigrant women in transnational marriages in Taiwan in an attempt to examine the relationship between demographic variables, acculturation, and health-related quality of life. This study used the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA), which was originally developed as a unidimensional assessment of acculturation. Level of acculturation was
significantly correlated with the SF-36 domains of mental health, bodily pain, social functioning, vitality, and the mental health summary score. Similar to other studies with immigrant women (e.g., Avis & Colvin, 2007; Lim et al., 2008), the authors concluded that Vietnamese women with low levels acculturation are likely to have more bodily pain and impaired social functioning (Yang & Wang, 2011).

Lastly, Buscemi, Williams, Tappen and Blais (2012) investigated the interrelationships between acculturation, self-perceived health-related quality of life status (as measured by the SF-8 scale), age, gender, education, years in the United States, and income among a community sample of Hispanic American elders. Those who were more acculturated to mainstream American culture as determined by the unidimensional Cross Cultural Measure of Acculturation had significantly higher mental HRQOL summary scores. Although the authors did not specify on what acculturation framework they based their work, the terminology they used (e.g., ‘more acculturated’) implies that they had a unidimensional view of acculturation.

Aside from studies which utilize the unidimensional model of acculturation, other studies have focused on the relationship between acculturative stress and QOL, particularly health-related QOL (HRQOL; e.g., Lim et al., 2008; Thoman & Surís, 2004; Wang, Li, Stanton, & Fang, 2010). The degree of pre-migration planning and poor psychological state, including acculturative stress and depression, has been associated with differing levels of quality of life. For example, Thoman and Suris (2004) conducted a study with patients of a community psychiatric clinic to investigate whether levels of acculturation and acculturative stress predicted HRQOL and mental health. The authors found that level of acculturation was not predictive of psychological distress and HRQOL. On the other hand, acculturative stress did predict psychological distress and HRQOL-mental health subscale, but not HRQOL-physical
functioning subscale. In a study with Latino day labourers (i.e., daily ‘under the table’ miscellaneous labour) in San Diego, California, Salgado and colleagues (2012) recently examined the relationship between acculturative stress, social support, and health-related quality of life. A significant interaction was found between social support and acculturative stress on the physical health summary score, but not on the mental health summary score as measured by the SF-12v2. It is of note that several of the above studies investigated HRQOL, which is only one aspect of overall QOL.

The influence of acculturation on QOL may result from a lack of knowledge and familiarity with cultural norms of the dominant society regarding the means necessary to achieve the requisites of QOL one values. For example, if health is important and one does not speak English (in the case of Canada), services are not offered in their first language, or health system practices conflict with their values, then a person is likely to be dissatisfied with the health component of their QOL. Similarly, if interpersonal relationships or the need to belong are of importance and the individual feels discriminated against or racialized in the dominant society, this is likely to be a reason for life dissatisfaction, compromising the overall QOL evaluation for that individual (see Lim et al., 2008). Most studies on the relationship between acculturation and QOL have presented QOL as the outcome measure. For example, Virta and colleagues (2004) included life satisfaction as one of the measures of psychological adaptation in a comparative study of Turkish adolescents living in Norway and Sweden. The authors found that Turkish identity and integration strategy predicted better life satisfaction and self-esteem after age, country of birth, and parental SES were controlled for.

Two studies were found where the relationship between acculturation strategies and satisfaction with life was investigated with a sample of Brazilian immigrants. The first study
(Scottham & Dias, 2010) gathered online data from Japanese-descent Brazilians living in Japan. This study found that integrated and separated participants reported higher subjective well-being (as measured by the Satisfaction with Life Scale; Diener, Emmons, Larsen, & Griffin, 1985 as cited in Scottham & Dias, 2010) than members of the marginalized group. The second study (Costa, 2008a, 2008b, 2010), was conducted with a community sample of Brazilian immigrants living in Toronto. The author found a relationship between a QOL-associated concept and acculturation strategies. Specifically, there was a significant, though weak predictive relationship between separation strategy and depressive symptomatology, and these two variables shared a common predictor, namely Satisfaction with Life in Canada Index (SLCI). The SLCI had a negative predictive relationship with both Separation and depression symptoms. The less satisfied participants were with their lives in Canada, the more separated from the dominant culture they were and the more depressive symptomatology they experienced. This finding was the basis for investigating the potential mediating/moderating role of QOL in the present study.

Except for Costa’s research (2008a, 2008b, 2010), the aforementioned studies were all conducted outside of Canada, mainly in the United States, they used QOL or life satisfaction as an outcome measure, and most utilized different models of acculturation than the one proposed in the present research, either by employing a linear notion of acculturation (i.e., higher vs. lower acculturation) or by applying a set of demographic factors as proxy measures of acculturation. Therefore, although those studies provide an important field of inquiry, they do not investigate the phenomenon in similar ways suggested in the present study. A framework to assess QOL that is compatible with the constructs of culture and acculturation utilized here has yet to emerge. Furthermore, investigating whether QOL might also be a predictor rather than simply an
outcome may provide the field with further understanding of the complex relationship between acculturation and psychological adaptation.

**Mental health and quality of life**

Traditionally, the concept of health has been equated to the absence of illness. The concept of health proposed by the World Health Organization in the late 1940s is still widely accepted by the various health disciplines including psychology (Frisch, 2004). The concept states: “a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity” (World Health Organization, 1948; preamble). Other concepts have since been put forward, including notions of relativism of the concept according to age and culture; proposing it as an indiscriminate human right; and health as an experience of the whole community as opposed to the individual (see Awofeso, 2005 for a brief review).

In terms of mental health, the World Health Organization (WHO) has proposed that mental health is essential to quality of life and that mental health promotion is necessary to increase the overall health and QOL of individuals and their communities (World Health Organization, 2005). Among the gains associated with improved mental health, the WHO lists “healthier lifestyles; better physical health; improved recovery from illness; fewer limitations in daily living; higher educational attainment; greater productivity, employment and earnings; better relationships with adults and with children; more social cohesion and engagement and improved quality of life” (Friedli, 2009, p. III). Following the principles of the health concept proposed by WHO, mental health means not only the absence of illness, but also the promotion of more positive mental health even when no mental illness is present. Positive mental health is seen as a protective factor fundamental to QOL (Friedli, 2009), and the impact of mental health
problems on QOL appears to be proportional to the severity and comorbidity of mental health difficulties (Trompenaars, Masthoff, Van Heck, Hodiamont, & De Vries, 2006).

The relationship between mental health and quality of life appears to be mutual, meaning that they may predict each other. Most studies, both in physical and mental healthcare, present QOL as the outcome variable rather than a predictor. In a study of Chinese migrants to Hong Kong, depressive symptoms based on CES-D scores were the most prominent factor in reducing immigrants’ level of quality of life as measured by the WHO-QOL, whereas perceived social support and optimism enhanced quality of life (Wong et al., 2012). A similar finding was described by Lim and colleagues (2008) whereby a study of Korean immigrant women with breast cancer revealed that QOL was predicted by depression. Another study focusing on the QOL levels of Canadian individuals with first-episode mania (Michalak, Torres, Bond, Lam, & Yatham, 2013) revealed that frequency of past depressive episodes predicted QOL at the 12-month follow-up and that severity of depressive symptoms predicted QOL at the 12- and 18-month follow-ups. The predictive relationship in which QOL is the outcome has informed treatment planning and outcome assessment in all healthcare areas. QOL has been proposed as the main goal of any healthcare intervention, including mental health interventions. For example, paraphrasing Strupp (e.g., Strupp, 1996 as cited in Frisch, 2004), Frisch (2004) pointed out that from a client’s point of view, contentment (in this case, with their QOL) is the ultimate measure of treatment success.

Despite the predominance of studies investigating QOL as outcome, authors have contended that satisfaction with life can also be a predictor of outcomes in many areas of life such as work, general health (Friedli, 2009; Frisch, 2004), and mental health. Recently, a European study conducted simultaneously in France, Germany, and the United Kingdom found
that QOL was a predictor of schizophrenia relapse (Boyer et al., 2013). The authors found that higher quality of life as measured by the SF36 (a generic QOL instrument) predicted lower relapse rates over a period of 24 months. Interestingly, this finding was not supported by the QoLI (a QOL measure specifically used for assessment of individuals with mental health problems). Studies presenting QOL as a predictor are still scarce. An online literature search using a variety of key word combinations returned only studies with QOL as outcome. This trend does not indicate that QOL cannot be a predictor, however. A substantial amount of studies investigating the relationship between mental health and QOL utilize regression analyses, which provide models that are often interchangeable in terms of predictors and outcome. Therefore, it is possible that the limited literature on QOL as predictor may reflect the way QOL is conceptualized and result in overlooking the mutuality of QOL and mental health. For example, if one’s QOL is impacted by a job loss, geographical move, or physical illness, it is reasonable to expect that this person’s emotional health is likely to be affected. It remains the case, though, that these relationships are complex, and to establish a temporal causality among these phenomena is a daunting, if at all possible, task. The intersections between acculturation, mental health, and quality of life are discussed next.

**Acculturation, mental health, and quality of life**

When considering the relationships among mental health, acculturation, and quality of life for immigrants, the goal of life satisfaction seems to be a common one. This field of study is slowly flourishing; however, if the literature on the bidimensional acculturation model and quality of life is scarce, when mental health issues integrate the equation, then research and theoretical works are even more infrequent, with various studies utilizing the unidimensional model. Consequently, the results are inconsistent and at times difficult to compare since they are
based on different theoretical frameworks. There is still much to be investigated and understood in terms of the psychological mechanisms involved in the relationship between acculturation, QOL, and mental health. Many studies on this topic focus on college student populations and Asian or Latino communities in the United States (e.g., Thoman & Suris, 2004; Yoon et al., 2008). Furthermore, a number of proxy measures for acculturation, quality of life, and mental health have been used to examine these relationships: for example, poor migration planning (Chou et al., 2011), social activity (Jang & Chiriboga, 2011), social connectedness (Yoon et al., 2008) and social support networks (Ayers et al., 2009; B. J. Kim, Sangalang, & Kihl, 2012).

Some studies utilizing a bidimensional model of acculturation have found both direct and indirect relationships between acculturation, quality of life, and mental health. Lang and colleagues (1982) found that individuals with a bicultural orientation (equated to the use of integration strategy), tending toward an identification with Latin American values, were better adjusted in terms of psychological and overall social adjustment, including levels of life satisfaction. Thoman and Surís (2004) found that low bicultural orientation of Hispanic psychiatric patients was predictive of lower health-related quality of life (HRQL), in the mental health domain, and that assimilated patients exhibited higher HRQOL in the mental health domain.

More recently, in a community-based sample of Korean immigrants in the Midwest United States, social connectedness to mainstream society, or a sense of closeness and togetherness with one's social environment, partially mediated the relationship between acculturation (as measured by the Abbreviated Multidimensional Acculturation Scale, AMAS-ZABB) and subjective well-being, which was conceptualized as a combination of life satisfaction (Satisfaction With Life Scale) and affect (ongoing emotional reactions; measured
using the Positive Affect Scale of the Positive Affect Negative Affect Scale, or PANAS) (Yoon et al., 2008). Furthermore, acculturation had a substantial and direct effect on subjective well-being; the authors suggested this relationship may be more complex than originally proposed with other variables including income, education, and psychological variables mediating the effect.

A few other studies have found similar results to Yoon and colleagues’ (2008) work. For example, using regression analyses, Zhang and Goodson (2011) explored mediating and moderating effects of social interaction and social connectedness, which are elements of quality of life, on the process of acculturation. The authors found that social connectedness and interaction with Americans mediated links between adherence to host culture, or what the authors referred to as an acculturation dimension, psychosocial adjustment, and depression in Chinese international students from four universities in Texas. Chou, Wong and Chow (2011) found that high levels of acculturation stress and low quality of life predicted symptoms of depression measured by the CES-D in Hong Kong migrants from Mainland China suggesting a dynamic relationship between acculturative stress, quality of life, and depression. Kim, Sangalang and Kihl’s (2012) examination of predictors of mental health in elderly Korean immigrants yielded similar results whereby those immigrants with high social network support and high acculturation exhibited lower levels of depression symptoms.

The above studies contradict Ayers and colleagues’ (2009) findings, which as a result of structural equation modeling suggested that acculturation (i.e., assimilation) to the host, mainstream culture did not have a direct impact on depression and was not associated with social support. Rather, the authors concluded that acculturation was associated with reduced immigrant stress, which resulted in decreased symptoms of depression, and that immigrant stress and social
support were important mediators in predicting symptoms of depression. Even though some of these studies did not use the term QOL specifically, they did investigate domains of QOL such as social interaction and support. Given that investigation of QOL in the field of acculturation and mental health is a relatively new endeavour, the above studies could be considered as providing support for the inclusion of QOL in future research. It is of note that a few studies, such as Virta and colleagues’ (2004), presented earlier, have used quality of life as an outcome of the acculturation process.

The field of acculturation psychology has been bringing increasing attention to the complex and intersecting relationships between acculturation and health for immigrant communities: for example, mental health, self-rated health, and health-related quality of life, as well as sociodemographic and psychosocial mediators and moderators of these relationships within immigrant communities (Kimbro et al., 2012; A. M. Miller et al., 2006; Yoon et al., 2011). Researchers have been employing more sophisticated study designs that incorporate mediators and moderators such as perceived English fluency, parental involvement, and social support (Dao, Lee, & Chang, 2007; Oppdal, Roysamb, & Sam, 2004) in regression analyses, path analyses, and structural equation modeling to elucidate relationships between acculturation and mental health that were once thought to be direct and unidimensional (Kosic, 2004; A. M. Miller et al., 2006; Yoon et al., 2011; Yoon et al., 2008).

An example of a more sophisticated study design is the research conducted by Hwang and Myers (2007). Their study found that more acculturated Chinese Americans reported greater exposure to negative life events and social conflicts; however, level of acculturation did not directly increase risk for depression. These findings suggest that level of acculturation may moderate the effects of negative life events and exacerbate risk for depression for those Chinese
Americans who are more acculturated (i.e., assimilated) to the United States culture. The authors also propose that less acculturated individuals may be more resilient to the effects of stress and are better able to cope when negative life events occur suggesting a complex relationship between acculturation and mental health (Hwang & Myers, 2007). Similarly, ValenciaGarcia and colleagues (2012) used structural equation modeling to examine whether individual-level social capital, that is, the intangible resources in a community available through social networks and connections, was associated with acculturation, depression, and anxiety symptoms in Mexican American women. Acculturation was not directly associated with psychological distress; however, social capital increased with level of acculturation and was negatively related to depression and anxiety suggesting that social capital mediates the relationship between acculturation and both depression and anxiety symptoms (ValenciaGarcia et al., 2012).

Ahadi and Puente-Diaz (2011) suggested that the equivocal and weak results using traditional acculturation measures and acculturation strategies only explain a small amount of the variance in statistical models and that other psychosocial factors, such as personality variables, may explain the inconsistency of published results (Ahadi & Puente-Diaz, 2011). Furthermore, the number of studies exploring acculturation strategies in relationship to mental health and quality of life are still limited compared to those investigating and measuring acculturation in general (Yoon et al., 2013). An increasing number of studies is being published highlighting that both individual domains of acculturation and social context measures contribute to the relationship between acculturation, immigrant mental health, and quality of life, and that it is important to consider these constructs within the context of gender and different racialized groups (J. Leu, Walton, & Takeuchi, 2011). Perceived discrimination seems to be one of these
social context variables that have received more attention in the past few years (Berry, 2003, 2008; Berry & Sabatier, 2010; Caplan, 2007; Schwartz et al., 2010; Yoon et al., 2012).

If intervening or mediating variables between the acculturation, quality of life, and mental health dynamics are not examined, it would remain unclear whether the association between acculturating to the mainstream, host culture and positive mental health outcomes, as seen in numerous studies, is due to intrinsic merits of acculturation or other factors including income, employment, or discrimination by mainstream society (Yoon et al., 2012; Yoon et al., 2008). Quality of life may be one of such intervening factors, especially if conceptualized as being influenced by personality characteristics (Yoon et al., 2012). Its role in the relationship between acculturation strategies and mental health is the focus of the present study. Perhaps QOL serves as a buffer between the difficulties acculturating individuals experience and the risk for developing mental health problems.

Given that this study focuses on Brazilian immigrants, the next section will explore how Brazil’s history may have helped shape Brazilian culture, Brazilians, and their identity, resources, and struggles as immigrants.

**Brazil, Brazilian, Brazuca**

**Brazil – the country.**

Brazilian culture is rooted in hundreds of years of power relations in which one group dominated the other. The country and its people went through various systems of government, from colony (1500 – 1822), to monarchy (1822 – 1889), to republic (1889), to military dictatorship (1964 – 1985). By the time democracy was established through the first popular election in 1985, Brazilian people had over 400 years of enforcement of power by a domineering minority. Through oppression, as well as lack of education and knowledge, the majority of the
population remained subjugated and guaranteed the survival and wealth of the oppressive minority.

During the colonial and monarchic period, the majority of the population was comprised originally by native Brazilians and then African slaves, besides the Portuguese colonizers. When the republic was installed in 1889, Brazil was very much a multicultural country with immigrants from Spain, Germany, Italy, and Japan (Intituto Brasileiro de Geografia e Estatística, 2000). The initial appeal of Brazil as a vast country endowed with an abundant amount of natural resources, and therefore full of opportunities for development, was progressively overshadowed by its social class disparities, accumulation of wealth, and corruption in the political realm (Ribeiro, 2010). During dictatorship, those who dared think critically, especially left-wing scholars, artists, and community activists, were persecuted and exiled (Rodrigues, 2008). As a general rule, Brazilians were never encouraged to think for themselves and one of the main vehicles to maintain an ignorant population was to neglect education or to promote an education that gave the illusion of social equality (Keim, 2012).

Since the establishment of democracy in 1985, Brazil has produced a new constitution and has seen multiple monetary reforms. Yet, people had their financial assets confiscated by the government, the external debt to IMF sky-rocketed, the unemployment increased, poverty deepened its roots, low literacy continued, and social injustice was infused in all levels of society. The history of corruption in the government cut across all stages of government from colony, through monarchy, dictatorship, and democracy. Brazilians became accustomed to distrusting the government which has traditionally been patriarchal and has represented the interests of rich and powerful minorities (Ribeiro, 2010). In 2002, however, for the first time, Brazilians elected a left-wing president from the Worker’s Party (PT), Luiz Inácio (Lula) da
Silva, a factory worker and union leader who migrated to São Paulo from one of the poorest areas of the country. This event started a wave of changes in Brazilian history. Despite several controversies during his first term (Filgueiras & Gonçalves, 2007), Lula was re-elected and after his second four-year term, his successor, Dilma Rousseff, the first woman to be a president in Brazil, continues to implement policies started by Lula while promoting Brazil as an emerging economy in the international community. The governments of Lula and Dilma have been criticized as a form of populism and neoliberalism, rather than remaining loyal to their leftist roots (Morais & Saad-Filho, 2011).

Regardless of the controversies around Brazilian government in the past ten years, Brazil is slowly starting to be recognized for more than poverty, violence, corruption, carnival, samba, beaches, soccer, and the Amazon. Brazil is now considered an emerging market. It is part of the Mercosur, G-20, and BRICS (a group of five emerging nations: Brazil, Russia, India, China and South Africa). It accounts for almost half of South America’s area with 8,547,403.5 km\(^2\) (Milioli, 2001). At the latest census, its population was 190,732,694 people (Intituto Brasileiro de Geografia e Estatistica, 2010). According to a comparative graph based on the International Monetary Fund’s World Economic Outlook, Brazil’s GDP is projected to be $2.5 trillion in 2013, maintaining its position as the 7\(^{th}\) largest world economy (Bergmann, n.d.).

Brazil’s unemployment rate has decreased in the past seven years from over 10% to 5.7% at the beginning of 2012 (Mantega, 2012) with estimates to remain stable in 2013 (Instituto Brasileiro de Geografia e Estatistica, 2013). The illiteracy rate has decreased from 12.1% in 2001 to 8.6% in 2011, and the inequality in income distribution, even though still significant, has decreased in the past decade (Intituto Brasileiro de Geografia e Estatística, 2012). The lack of safety is still a concern for many Brazilians as only 49.7% feel safe in their cities while 69.3%
feel safe in rural areas (Intituto Brasileiro de Geografia e Estatística, 2012). Brazil will hold both the next World Cup (2014) and Olympic Games (2016), which has been a source of both pride and concern for the future of the country. The recent booming economy in Brazil and the country’s increasing relationship with other countries has been a catalyst to a new flow of immigrants to the country. In 2012, the government estimated that there were approximately 1.5 million new immigrants living in Brazil (Portal Brasil, 2012), although the ageing immigrant population has led some to identify the country no longer as an immigrant country but as country of immigrant descendants (Agência Brasil, 2013).

**Brazilians.**

How has the country’s trajectory helped shape Brazilian identity? Of course, particularities apply when considering that we are all a combination of multiple identities that intersect in different ways depending on the circumstances (Arthur & Collins, 2005; Moodley & Palmer, 2006). However, there are common aspects imprinted in many Brazilians. As in many other parts of the world, the indigenous people of Brazil were subjugated to European culture, religion, diseases, and various forms of abuse of power (da Silva, 2005). Aboriginals as well as African slaves were stripped off their ways of life, spirituality, dignity, and considered inferior to the dominant colonists. Both native and African people had to find ways to reclaim at least part of their identity. A known example was the incorporation of Christian symbolism in the polytheistic religion of African slaves as a way of preserving their religious heritage while appearing subservient and compliant (da Silva, 2005). Currently, both Candomblé (the original African religion) and Umbanda (the more recent combination of Candomblé, Catholicism, and European Spiritism) are two of the most prominent expressions of religious syncretism in Brazil,
having served as a platform for organization against slavery and providing hope for the end of the subordination of the black population (da Silva, 2005).

The religious example demonstrates the flexibility, creativity, and silent rebellion that are one of the roots of Brazilian culture and that co-exists with passivity and a lack of understanding of human rights. Brazilian history seems to exemplify the main theme of this study, that is, the changes that occur when different cultures meet, the impact of power relations in the strategies people use to adapt, and the ultimate emotional changes that ensue. Total assimilation might not be possible after all (as the unidimensional model of acculturation would argue), even in situations of colonialism and oppression.

Another form of rebellion has not been as pacific or silent. Drug lords in the main metropolitan areas of the country lead groups that oppress locals and challenge police and military power. A reality-based, fictional depiction of this issue is the famous movie Cidade de Deus, translated title of City of God (Meirelles & Lund, 2002). In the midst of social chaos, small groups are formed to both contest the mainstream power and exert their own power through overt violence and intimidation. In reality, organized crime continues to spread its terror across the country as an organic expression of socio-economic inequality, political power imbalance, and lack of trust in governmental institutions, which has created a history of informality and corruption as problem-solving strategies (Da Silva Ribeiro, 2010).

As a result of the overt and covert power discrepancies and violence, Brazilian art has been one of the major vehicles of expression of criticism, hope, celebration, and activism (L. Leu, 2006; Ridenti, 2000). The majority of the exiled individuals during dictatorship were intellectuals and artists (Rodrigues, 2008). Popular musicians from that period were Caetano Veloso, Chico Buarque, and Gilberto Gil, among others. Music continues to depict Brazil’s
multiple incongruences and celebrate its sources of beauty and pride. Carnival has been conceptualized as an opportunity for the low income classes to shine, engaging in the illusion of social mobility not possible in the daily life of hierarchical societies (e.g., DaMatta, 1997; Dias Cavalcanti, 2012).

**Brazucas?**

Another form of silent resistance has been the exodus of Brazilians to other parts of the world in search for a better life. Brazilians have emigrated from Brazil due to political, economic, and safety reasons for decades now. Brazil’s Ministry of Foreign Affairs estimates that there are currently 2,521,576 Brazilians living abroad with Canada being the 16th most popular destination (Brasil - Ministério das Relações Exteriores, 2012). A review by Barbosa (2012) indicates that Brazilians started to come to Canada in the early 1900s. In the 1960s and 1970s, during the period of military dictatorship, many refugees left the country (R. Barbosa, 2012), including Paulo Freire, who temporarily taught at the Ontario Institute for Studies in Education of the University of Toronto (Schugurensky, 2011) and Herbert de Souza (Betinho) who studied at and later received an honorary degree from York University (York University, 1996). These are important figures in Brazil’s fight against oppression in the fields of education and social justice. According to Barbosa (2012), however, spontaneous emigration only became prominent in the early 2000s, counting the United States and Japan among the main destinations.

The flow of Brazilian immigrants to Canada increased over 800% in a period of 20 years, between 1986 and 2006. According to the 2006 Canadian census, there were 12,500 Brazilians citizens in Canada (Statistics Canada, 2006b) while in 1986 there were only 1,365 (Magalhães et al., 2008). Based on data available up to 2010, the Brazilian Ministry of Foreign Affairs estimated that there would be 25,292 Brazilians living in Canada, (Ministério das Relações...
Exteriores, n.d.). The number of Brazilian individuals granted permanent resident status in 2011 and 2012 were respectively 1,219 and 1,230 (Citizenship and Immigration Canada, 2013). When the latest two estimates by the Brazilian and Canadian governments are combined, the current projected Brazilian population in Canada is nearly 28,000 people.

In 2008, for the first time, a project researched the characteristics of Brazilians living in Ontario (Magalhães et al., 2008). Most of the 622 participants were younger than 45 years old (72%), heterosexuals (91%), self-identified as white (80%), legally married (68%), with at least some university education (85%), and living in Toronto (percentage estimated based on graph data = 55%). Respondents listed 15 religious affiliations with Catholicism being predominant (49%). The Southeast region of Brazil was the primary place of origin, with 38% of participants originating from São Paulo state alone. Most people had not lived in any other country prior to immigrating to Canada (81%). Just over half of respondents had been in Ontario for up to four years. Only 7% did not have a visa to stay in Canada.

The reasons for Brazilians to leave Brazil included “violence, insecurity, corruption, inequality, prejudice, low quality of life and lack of respect for human rights in Brazil… few opportunities for professional growth and economic security” (Magalhães et al., 2008, p. 17). Accordingly, they chose Ontario as it presented better professional and educational opportunities, better quality of life, more safety, and the advantage of having family or friends already settled in the area. Some prioritized cultural diversity, availability of undocumented work, and similarities to their life in Brazil such as having larger cities, warmer climate, and the largest concentration of Brazilians when compared to the rest of Canada (Magalhães et al., 2008). The search for differences (improvements) seemed to be accompanied by a requisite of
minimum similarities, reflecting a desire to improve life while remaining true to what was familiar and brought comfort.

This tendency to look for a certain degree of familiarity seemed to have also been observed in the immigration of individuals from two Brazilian cities, Criciúma and Governador Valadares, known to have a consistent flow of immigrants to the United States, specifically Boston (Siqueira, de Oliveira Assis, & de Campos, 2010). The authors suggested that the presence of social networks between the origin and destination places is what maintains the emigration flow as they help mitigate the “psychological, social and economic costs of immigration” (p. 212 - translation added). A study with undocumented Brazilians living in Toronto (Brasch, 2010) corroborated the role of social networks in assisting participants to deal with major obstacles to adaptation to Canada. According to the author, these networks provided both practical resources for daily living as well as emotional support to cope with the difficulties of adjusting to new lives in Canada.

In terms of life in Canada, the study by Magalhães and colleagues (2008) collected information on English proficiency, social networks, and settlement difficulties. Most respondents spoke English, with only eight speaking basic to no English. They were mostly in a relationship with Brazilians (55%), had frequent contact with family and friends in Brazil (90%), frequently travelled to Brazil (approximately 70%), and had mostly Brazilian friends. The major obstacles to adequate settlement were difficulty finding a first job, command of English, cold climate, and loneliness, which involved both missing family and having trouble making friends. Despite the difficulty of finding work, only 10% were unemployed. The most frequent strategy to find a job was through a Brazilian friend (35%).
With regard to life satisfaction, most respondents in Magalhães and colleagues’ (2008) study were satisfied (83%). The study also inquired about people’s experience of discrimination. Most respondents (70%) did not feel discriminated against because of race (perhaps because the majority was white); however, approximately 30% felt discriminated against on the basis of difficulties with English, having an accent, having foreign credentials, and being part of the Brazilian culture, or being compared to the stereotype of being “easy” as a Brazilian woman. The latter form of discrimination was reported by 50% of the female respondents. The Brazilian government has acknowledged the presence of negative stereotypes associated with Brazilians living abroad, particularly as they relate to women. As a response, the Ministry of Foreign Affairs has developed a campaign to spread a positive image of Brazil and its people through the dissemination of national cinema, music, capoeira, literature, and workshops (Brasil - Ministério das Relações Exteriores, 2012).

Respondents seemed to perceive Canadians as open and receptive to Brazilians, but also held an ambiguous view of Brazil. In the words of Magalhães and colleagues (2008):

The study respondents described the face of Brazil in Canada as that of a country of opposites. On the one hand, Brazil is viewed as a cheerful country, with beautiful women, good music, a warm climate, Carnival, samba, soccer, parties and the beach. On the other hand, it is seen as a stereotype of an underdeveloped country, with great social inequality, prostitution, violence, hunger, misery, exploitation of people and natural resources (p. 34).

This view of Brazil as opposites seems to capture the extremes of the experiences lived by Brazilians. One end of these extremes propels them/us to try a better life in Canada, while the
other end is the cause for loneliness, longing, not belonging, and idealization of Brazil when in unfamiliar territory.

As a result of their study, Magalhães and colleagues put forward some recommendations. They advised against the classification of Brazilians as Latinos as this is a term with which many Brazilians do not identify and which is based on race rather than place of origin. This recommendation seems to be somewhat related to another tendency observed initially in the United States of America. Brazilian immigrants to the United States of America began to call themselves ‘Brazuca’ as perhaps a symbol of a common identity, an informal strategy to unify and increase their sense of belonging while in another country (de Andrade Tosta, 2004). Through an analysis of Brazuca literary works, de Andrade Tosta concludes that Brazilians in the United States of America also try to hold on firmly to their Brazuca identity as a form to escape prejudices that the Latino community experience. The term has, therefore, a strong socio-political root as an attempt to achieve respect from the dominant society. The identity configurations behind the meaning of being Brazuca are complex and it is unclear whether Brazilians living in Canada identify with all levels of the term. However, it became common for Brazilians to refer to themselves as Brazuca, almost as a short form for ‘brasileiro.’ For example, it is common to see in online forums Brazilians who wish to immigrate to Canada asking for help and information from other ‘Brazucas.’

The second recommendation posed by Magalhães and colleagues (Magalhães et al., 2008), is related to the challenges that stereotypes of Brazil and Brazilians and the process of

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9 I was interested in what Brazilians had to say with regard to being classified as Latin Americans or Latinos. An internet search revealed heated discussions in online Q&A sites. Some contributors agreed with the classification of Latin American (derived from speaking a Latin language), but not Latino (identified as a racial nomenclature specific to the United States). Generally, most Brazilian respondents opposed to being considered Latino. Several
adjustment to Canada seem to pose to the development of a Brazilian/Canadian identity. Four barriers were identified to the integration of Brazilians in Ontario: misinformation of Canadians with regard to Brazil and Brazilian culture; discrimination within the Brazilian community; Brazilians’ lack of information regarding Canadian social practices, and difficulty befriending Canadians. The study indicated that immigrants with an expired visa reported lower income and English proficiency, while having similar levels of education as the immigrants with valid visas. They also reported poor work conditions and discrimination as a result of being undocumented. However, they still seemed to be satisfied with their lives in Canada.

The authors suggested that permanent residents and Canadian citizens constituted a homogenous group due to Canada’s immigration system based on points assigned for a set of specific characteristics (Magalhães et al., 2008). Given the disparity in the number of documented and undocumented participants, the results of this study reflected mostly the realities and opinions of documented immigrants.

What do Brazilians living in Toronto need to adjust well to Canada? Living at the intersection of the two proposed extremes, while trying to adapt to a new country, seems to create an identity problem for Brazilians. Magalhães and colleagues (2008) suggest what appears to be true to many acculturating individuals:

The challenge for the Brazilian community that has settled in Ontario is building its own identity, one that highlights its cultural hybridism and is affirmed by examples of racial and cultural exchanges as an expression of respect and value for differences, and that affirm the mix as an advantage and source of richness, enabling one to belong to many different worlds in a single lifetime. (p. 44)
Canada's multiculturalist policy would seem to offer the answer to Magalhães and colleagues’ (2008) description of the challenges Brazilians might face in trying to adjust to Canada. Yet, the above excerpt also implies that Brazilians living in Ontario are still struggling to build their own identity while respecting and integrating diversity and having a sense of belonging associated to “different worlds” (Magalhães et al., 2008, p. 44). Notwithstanding these challenges, based on the studies available so far (Costa, 2008a, 2010; Magalhães et al., 2008), Brazilian respondents have indicated satisfaction with their lives in Canada. Perhaps Brazil’s history as a dominated country, struggling with many socio-economic challenges, led Brazilians to blend resilience and appreciation for life. Despite (or because of) coming from conflicting opposites, Brazilians are equipped to a certain extent to deal with many cultures, survive injustice, rely on each other, and find creative ways to succeed (or at least get by). Whatever difficulties they have faced or are still facing seem to have been met with strength and optimism. Brazucass or not, they continue to work hard to being recognized as a hard-working and respectable group.

This review explored the relationships between acculturation, particularly acculturation strategies, mental health, and quality of life. It indicated that this relationship is multifaceted and varies depending on how it is conceptualized and measured, the groups being studied, and the contextual variables that may inform individuals’ choices and acculturation outcomes. The history and culture Brazilians bring with them, their hopes and expectations, and the challenges Magalhães and colleagues (2008) suggested have likely influenced their appraisals of life satisfaction in previous studies (e.g., Costa, 2008a, 2010; Magalhães et al., 2008). This historical and contextual background also raised questions about how it may help shape the strategies

ethnicity, skin colour, and mother tongue were evident (e.g., http://www.answerbag.com/q_view/329479).
Brazilian immigrants use to acculturate and how these strategies relate with their current mental health and life satisfaction. The next chapter elaborates on such questions and delineates the methodological parameters utilized to investigate the relationships between acculturation strategies, mental health, and quality of life for Brazilian immigrants living in Toronto.
Chapter 3:

Research Method

This study utilized a quantitative exploratory analysis to test the role of quality of life (QOL) in the relationship between acculturation strategies and negative affect in a sample of adult Brazilian immigrants living in the Greater Toronto Area. It also explored the relationship between acculturation strategies and well-being. An electronic survey collected information about demographic characteristics, immigration experience, acculturation strategies, symptoms of negative affect, and quality of life (QOL). The present section details the methodology utilized including research question and hypotheses, participants, measures, procedures for recruitment, screening, data collection, data quality assurance, data analysis, and ethical considerations.

Research Question

There is a limited number of studies investigating the role of QOL in the relationship between acculturation strategies (Berry, 2003) and negative affect. One such study (Costa, 2008a, 2010) with Brazilian immigrants revealed that Separation Strategy was weakly, but significantly related with depressive symptomatology, and that Satisfaction with Life in Canada Index (SLCI) was a significant predictor of both Separation Strategy and depressive symptomatology, perhaps acting as a mediator or moderator. This finding generated the interest in further investigating the relationship between acculturation strategies and well-being as well as the potential role of quality of life (correlate of satisfaction with life) in the relationship between acculturation and negative affect.

Specifically, this study answered the following research question: What are the associations between acculturation profiles, quality of life, and negative affect? This question was addressed through three supporting questions:
1. Does Quality of Life **mediate** the relationship between acculturation profiles and negative affect?

2. Does Quality of Life **moderate** the relationship between acculturation profiles and negative affect?

3. Which acculturation profiles are associated with favourable well-being, where favourable well-being is represented by low negative affect, high quality of life, and low SLCI?

   Preliminary analyses involved categorizing patterns of combination of acculturation strategies and identification of participants’ levels of QOL, negative affect, and satisfaction with life in Canada.

**Participants**

**Eligibility criteria and sample screening.**

**Inclusion criteria.** Participants of this study were born in Brazil, lived in Brazil for at least 10 years, and were Canadian citizens, permanent residents of Canada (landed immigrants, refugees, refugee claimants), or undocumented immigrants (expired visa, no visa, no immigration documents); they lived in the Greater Toronto Area (GTA), were at least 16 years of age, and spoke either Portuguese or English.

**Exclusion criteria.** Individuals in sojourn were excluded from this study. These included individuals who were in Canada on student, visitor, and work visas.

The above criteria were consistent with the objectives of this study and followed recommendations from previous studies. For example, Berry (1997) indicated that there are differences in acculturation experiences between first and second generations of immigrants as well as differences in the experience of acculturation for immigrants and sojourners. These
findings highlight the importance of limiting the place of birth to Brazil (i.e., first generation immigrants). Similarly, given that the main objective of this study was to investigate the process of acculturation triggered by immigration (rather than sojourn or family biculturalism), individuals had to have an immigration status that implied a longer than transitory stay. Participants were required to have lived in Brazil for at least 10 years so that they would have been socialized and undergone major developmental stages within the Brazilian culture. In regard to limiting participants’ place of residence to the Greater Toronto Area, studies have found that the social context in which acculturation occurs influences acculturation outcomes (e.g., Berry, 2006). For example, the attitude of the dominant culture towards immigrants may influence the degree to which these interact with the dominant culture (Berry, 2006; Navas et al., 2005). Since Toronto is the largest and most multicultural city in Canada, it appears reasonable to assume that there are differences in the experience of immigration and acculturation between immigrants who choose Toronto to live and those who choose other cities. Moreover, variations of attitudes toward immigrants are likely to exist between larger metropolitan areas and smaller towns. These types of contextual factors are impossible to measure and if not controlled, they might have become confounding factors for the results of this study. Finally, although the experience of acculturation may vary across one’s lifespan (Berry, 1997), limiting the minimum age to 16 prevented problems regarding the informed consent process with minors.

**Sample pre-screening.** Participants were selected based on a non-random convenience sample (Kerlinger & Lee, 2000). The inclusion criteria were explained to participants and recruitment source groups via e-mail, in-person presentations, posters, and through the Information Letter at the beginning of the online survey. Considering that divulging their immigration status was a delicate issue, potential respondents approached in public spaces
received information regarding the general inclusion criteria and were not screened in order to protect their privacy. Although an e-mail and telephone number was available to all potential participants, only a few individuals contacted me to clarify questions with regard to inclusion criteria. In these circumstances, clarifications were provided without asking them to disclose any information regarding their immigration status. Although the first major page of the survey was the Information Letter, which stated the inclusion criteria, some individuals proceeded to respond the survey regardless of their eligibility. Since this was an online survey and virtual snowballing was a major recruitment strategy, it was impossible to prevent individuals who did not meet the inclusion criteria from accessing the survey website. Therefore, participants were screened electronically through a ‘branching’ function of the online survey engine. This feature prevented participants from continuing the survey if they provided undesired answers to a block of inclusion criteria questions.

**Final sample selection.** A total of 422 individuals accessed the survey website. The final sample was selected in three stages based on participants’ consent, eligibility, and effort in responding to the survey questions.

- **Stage One - Consent:** A total of 138 individuals were excluded at this stage. One of the participants had their survey terminated due to an unknown reason. Another 137 people did not provide an answer to the consent question or answered ‘no.’

- **Stage Two - Eligibility:** A total of 284 participants entered stage 2 of sample selection. Participants were screened for inclusion criteria automatically by the survey engine’s ‘branching’ function. Out of the 284 individuals who consented to participate in the study, 13.7% \( (n = 39) \) were excluded from the final sample, either because they did not answer at least one of the inclusion criteria questions \( (n = 18, \)
6.3%) or because they did not meet the requirements for at least one of the criteria \((n = 21, 7.4\%)\). For example, they might have had a visitor visa or lived outside of the Greater Toronto Area.

- **Stage Three – Insufficient effort responding:** A total of 245 participants comprised stage 3 of sample selection. Their answers were analysed for data quality (see details under the section Data preparation and quality assurance). Participants who were missing more than five out of the 12 total scale scores \((n = 62, 25.3\%)\) or who demonstrated insufficient effort responding \((n = 3, 1.2\%)\) were excluded from the sample.

**Final sample of participants.**

The final sample of participants included 180 Brazilian-born adults living in the GTA. Nearly two thirds \((n = 124, 68\%)\) of participants were females while males represented 31.1\% \((n = 56)\) of the sample. Participants’ ages ranged from 16 to 63 with a median age of 35 years old. All participants were born and lived in Brazil for at least 10 years. The amount of time respondents lived in Brazil prior to emigrating ranged from 10 to 50 years, with a mean of 28.85 years \((SD = 7.43)\). Participants’ ages at the time they immigrated to Canada ranged from 15 to 51 years of age, with a mean of 29.43 years \((SD = 7.21)\)\(^{10}\). The majority of participants were documented \((n = 164, 91.1\%)\) and 8.9% \((n = 16)\) did not have their immigration documents. Of the documented participants, 108 (65.9%) were permanent residents or landed immigrants, 53 (32.3%) were Canadian citizens, and three (1.8%) were refugee claimants. The time participants had been living in Canada ranged from one to 45 years, with a median of four years. Participants were divided in three groups each corresponding to approximately one third of the distribution of
the number of years living in Canada. Just over one third of participants (n = 68, 37.8%) had been living in Canada for up to two years. Nearly one third of participants (n = 57, 31.7%) had been living in Canada between three and seven years, and nearly one third of respondents (n = 55, 30.6%) had been here from eight to 45 years. All participants were living in the Greater Toronto Area. Chapter 4 contains a detailed description of the demographic composition of this sample.

Measures

This study utilized seven measures in the form of questionnaires and scales to collect data. These measures helped investigate how variables such as demographic characteristics, immigration factors, and life orientation influence acculturation strategies’ patterns and their relationships with negative affect and quality of life. All measures were available in English and Portuguese.

Most measures utilized in this study were available in the public domain over the internet, except for three questionnaires. These are the Questionnaire of Demographic Data, Short Version and the Immigration Context Questionnaire, Revised, utilized in a previous study (Costa, 2008a, 2008b), as well as the Quality of Life Profile, Adults, Full Version (I. Brown, Raphael, & Renwick, 2002), which is a copyrighted measure, available only through license purchasing.

**Questionnaire of Demographic Data, Short Version (QDD-S).**

The Questionnaire of Demographic Data, Short Version (QDD-S) (Appendix B) is a shortened version of the Questionnaire of Demographic Data (Costa, 2008a, 2008b), which had 24 items. Ten items were excluded resulting in a questionnaire with 14 items that inquired about

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10 The discrepancy between the minimum time respondents lived in Brazil prior to emigrating and participants’ ages
inclusion criteria and gathered information on factors that have been found to be moderators or protective factors during the acculturation process (Berry, 1997). These factors are organized in the following three categories: demographics, socioeconomic status, and cultural identification. The demographic category included items about gender, age, marital status, and status in Canada\textsuperscript{11}. The socioeconomic status category comprised questions about level of education, profession, employment, income level, and living conditions\textsuperscript{12}. The cultural identification category contained items inquiring about citizenship, cultural and ethnic affiliation\textsuperscript{13}. The original questionnaire (QDD) was first written in English and then translated into Portuguese (see Appendix C). Most questions were close-ended; however, a few items had response choices such as ‘other, please specify.’

**Immigration Context Questionnaire, Revised (ICQ-R).**

The Immigration Context Questionnaire, Revised (ICQ-R; Appendix B) asked questions about participants’ immigration circumstances. This instrument is a shortened and slightly modified version of a previously developed questionnaire (Costa, 2008a, 2008b), which had 36 items. The modifications that resulted in the ICQ-R included deletion of nine items, introduction of a new item addressing inclusion criteria, and two new items investigating a previous history of mental health difficulties. The original ICQ asked questions about a history of depressive symptoms and treatment. The ICQ-R added questions about the history of symptoms and treatment of anxiety and stress, and modified questions related to treatment to include anxiety and stress.

The ICQ-R is comprised of 30 items that correspond to factors known as moderators or

\textsuperscript{11} Demographic category: items 1, 2, 3, 5, 8, and 9.

\textsuperscript{12} Socioeconomic status category: items 10, 11, 12, 13, and 14.
protective factors of the experience of acculturation and symptoms of mental health difficulties (Beiser, n.d.; Berry, 1997; Ward & Kennedy, 1994). Items fell under one of five categories: pre-acculturation, during-acculturation (Berry, 1997), social support network, and attitude toward Canadian culture and life in Canada, as well as history of mental health difficulties. The pre-acculturation category\textsuperscript{14} included items about reasons for migrating, original immigration plans, and pre-immigration language proficiency. The during-acculturation category\textsuperscript{15} comprised questions about current language proficiency, work, and time in Canada. The social support network category\textsuperscript{16} asked questions about access to people and services for support. The attitude toward Canadian culture and life in Canada category\textsuperscript{17} contained questions regarding culture compatibility and level of satisfaction with life in Canada (Beiser, n.d.; Berry, 1997; Ward & Kennedy, 1994). The history of mental health difficulties category\textsuperscript{18} inquired about difficulties and treatment for depression, anxiety, and stress that occurred prior or during acculturation.

The original ICQ was first written in English and then translated into Portuguese. The wording of the ICQ-R items was maintained for both the English (Appendix B) and Portuguese versions (Appendix C). Most ICQ-R questions are close-ended; however, a few items had response choices such as ‘other, please specify.’

**Acculturation Strategies Scale (ASSc).**

There are various methods for assessing acculturation strategies: a) four scales; b) four vignettes; and c) two independent scales (see Berry & Sabatier, 2011 for a review). This study utilized the Acculturation Strategies Scale - ASSc (Appendix B), comprised of four subscales,

\textsuperscript{13} Cultural identification category: items 4, 6, and 7.
\textsuperscript{14} Pre-acculturation category: items 2 to 7, 13 and 14.
\textsuperscript{15} During-acculturation category: items 1, 9 to 12, and 15.
\textsuperscript{16} Social network category: items 16 to 18.
\textsuperscript{17} Attitude toward Canadian culture and life in Canada category: items 8, and 19 to 23.
each gathering information on acculturation attitudes and behaviors related to each of the four acculturation strategies conceptualized by Berry (i.e., integration, assimilation, separation, and marginalization; e.g., 2001). The four-scale method was chosen because its items reflect the complexities of the acculturation phenomenon and comprise both attitudes and behaviours, as opposed to capturing only an idealistic perspective sometimes attributed to this type of scale (Nguyen & Benet-Martínez, 2013). It captures variations in acculturation strategy per domain, not possible when using vignettes. In addition, participants choose which acculturation strategy best resonates with them instead of having this defined by statistical methods, such as median split in the case of the two-scale method. Finally, the four-scale method allows comparisons and potential data compilation with a previous study (Costa, 2008a), which is important in order to build the so far limited knowledge of the acculturation experiences of Brazilians.

Berry and colleagues (1989) were the first to develop such type of scale; however, many other researchers have adapted it for use in many studies as recommended by Berry (see review by Berry, 1997). The present study utilized a version previously created and validated for use with Brazilian individuals living in the greater Toronto area (see Costa, 2008a for details on the construction of this measure). The ASSc investigated acculturation strategies (attitudes and behaviours) based on an adaptation of domains drawn from previous studies (Benet-Martínez & Haritatos, 2005; Berry, 2001; Berry et al., 1989; Costa, 2008a; Navas et al., 2005; Neto, 2002; Ryder et al., 2000). The original instrument (Costa, 2008a) contained 56 items distributed across 4 domains (family, social life, daily living, and power relations). Each domain had two sub-domains; each sub-domain had four acculturation strategies, and each strategy had two statements, one that corresponded to an attitude and one that corresponded to a behaviour. Figure

18 History of mental health difficulties category: items 24 to 30.
2 demonstrates how the original scale was organized.

<table>
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<tr>
<th>Domain</th>
<th>Sub-domain</th>
<th>Strategy</th>
<th>Statement</th>
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<td></td>
<td></td>
<td></td>
<td>I have both Brazilian and Canadian Friends</td>
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<td></td>
<td>I would rather have both Brazilian and Canadian Friends</td>
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<td>Integration</td>
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<td>Assimilation</td>
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<td>Social Life</td>
<td>Social Activities</td>
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Figure 2. Acculturation Strategies Scale - Multilevel Structure (as seen in Costa, 2008a).

All statements were specific to the relationship between Brazilian and Canadian traditions and customs. Some of the items were adapted from a Portuguese scale created by Felix Neto (2002), upon his authorization. Therefore, statements were created/adapted first in Portuguese (Appendix C) and then translated into English (Appendix B). Each statement was rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

An analysis of the properties of the original ASSc revealed that six items did not load significantly on the Integration Strategy Subscale and were, therefore, deleted (Costa, 2008a). The validated ASSc contained 50 final items. The Integration Strategy Subscale consisted of eight items while the other three subscales retained all of their 14 original items. All four subscales demonstrated good internal consistency with $\alpha = 0.73$ for the Integration Subscale; $\alpha = 0.79$ for the Assimilation Subscale; $\alpha = 0.81$ for the Marginalization Subscale; and $\alpha = 0.84$ for the Separation Strategy Subscale.
Subscale scores resulted from mean calculation of the combined attitude and behaviour scores reflecting a similar strategy across each domain. The Results Chapter presents a full description of the statistical properties of the ASSc for the present study.

**Quality of Life Profile, Adults, Full Version (QOLP).**

The QOLP (Appendix B) (I. Brown et al., 2002) is a 54-item questionnaire that assesses an individual’s quality of life as a weighed product between two scales: level of importance and satisfaction. Each scale addresses the participant’s opinions across three life domains. Each domain is divided in three areas of life, totalling nine areas of life. Each area of life contains six items, for a total of 54 items. Figure 3 demonstrates how the QOLP is organized.

![Figure 3. Quality of Life Profile - Multilevel Structure.](image)

Besides the importance and satisfaction scales, the QOLP has two additional scales that measure the participant’s perception of control and opportunities across the nine areas of life. These two scales do not integrate the final QOLP score; however, they provide a context within which to interpret the overall QOL score. Participants rate each QOLP statements on a five-point Likert scale ranging from 1 (not at all, none) to 5 (extremely, a lot, a great many). The meaning of the point value varies depending on the scale. Additional response options such as ‘Don’t
‘Know’ and ‘Not applicable’ were available in the original measure, but were not used in the present study as they did not seem to apply to this community sample. Moreover, this omission was intended to encourage reflection when participants felt uncertain about an answer.

The QOLP yields five scores: nine areas of life, three domains, overall quality of life, control over quality of life, and opportunities to change quality of life, which are calculated as follows (I. Brown et al., 2002; Debiaggi, 1999; Quality of Life Research Unit, personal communication, December 4, 2012, Raphael, D’Amico, Brown, & Renwick, 1998):

1. Compute item scores: Importance X (Satisfaction - 3)
2. Compute Area of Life scores: sum the scores of the six items that compose each area of life and divide by the number of items answered.
3. Compute Domain scores: sum the scores of the three areas of life that compose each domain and divide by three.
4. Compute overall QOL scores: sum the scores of the three domains and divide by three.
5. Compute Control scores: sum the scores of all nine control items and divide by the number of items answered.
6. Compute Opportunity scores: sum the scores of all nine opportunity items and divide by the number of items answered.

The authors of the QOLP analysed its psychometric properties at length. Their analysis revealed that QOLP had good internal consistency for both Importance and Satisfaction across domains. Within the Importance scale, the internal consistency was mostly above $\alpha = 0.70$. Only two sub-domains obtained lower internal consistency, namely Spiritual Being with $\alpha = 0.68$ and Community Belonging with $\alpha = 0.62$. For the Satisfaction subscale, most sub-domains obtained
α > 0.80. The internal consistency for the Control Scale was α = 0.87 and for the Opportunity scale was α = 0.92. Participants had access to a Portuguese version of the QOLP (Appendix C) (Quality of Life Research Unit, 2004). The psychometric properties of the Portuguese version were not available; however, the reliability of the combined English and Portuguese versions for the present study is presented under the Quality of Life section of the Results chapter.

**Center for Epidemiologic Studies Depression Scale (CES-D).**

The CES-D (Radloff, 1977) was one of the three scales used to assess participants’ levels of negative affect. The CES-D (Appendix B) is a self-report instrument that assesses current frequency and severity of depression symptoms in the general population. Its 20 items were rated on a four-point Likert scale, from 0 (Rarely or none of the time - less than 1 day) to 3 (Most or All of the Time - 5-7 days). Items 4, 8, 12, and 16 were reverse coded, given that these items reflected the opposite of depression symptoms.

The CES-D questions inquired about the frequency of emotions and events over the past week, and assessed six different domains: depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance. Sample questions included “I was bothered by things that usually don’t bother me” and “I felt that I could not shake off the blues even with help from my family or friends.”

This measure has been traditionally used and validated for studies involving diverse populations (e.g., Jang, Kim, & Chiriboga, 2005; Kanazawa, White, & Hampson, 2007; McCabe, Vermeesch, Hall, Peragallo, & Mitrani, 2011; Oh et al., 2002; Torres & Rollock, 2007) including Brazilians living in the Greater Toronto Area (Costa, 2008a).

A version of the CES-D in Portuguese (Appendix C) was be available to participants. This version was validated by Silveira and Jorge (1998, 2004) and follows the same structure of
items and scoring procedures used in the original version. Items were back-translated according to standard practices (Chiriboga, Jang, Banks, & Kim, 2007) and the validation conducted with a sample of approximately 600 individuals. Its electronic version has been well-accepted (e.g., Costa, 2008a; Houston et al., 2001).

The normatization process of the CES-D in the United States resulted in an alpha coefficient around 0.85 or higher in both general population and patient samples (Radloff, 1977). The scale’s test-retest reliability ranges from 0.54 for six months to 0.67 for four weeks. The validation of the Portuguese version conducted in Brazil obtained an alpha coefficient of 0.85 for both general population and patient samples. The English and Portuguese versions of the CES-D obtained excellent reliability ($\alpha = 0.91$) in a study with Brazilian immigrants in Toronto (Costa, 2008a).

The CES-D is said to discriminate well between psychiatric patient and general populations (Radloff, 1977), using the cut off score of 16 or above (e.g. Chiriboga et al., 2007; Silveira & Jorge, 1998) to indicate increased probability for depression. However, the CES-D is not considered a diagnostic or clinical tool (Radloff, 1977); rather, it is used to measure depressive symptomatology (Gonidakis et al., 2011). This study did not use cut off scores as it did not have the intention to diagnose or analyse depressive symptomatology separately. CES-D scores were used as one of the measures of negative affect.

As with most measures, the CES-D has some limitations. Although it has been used successfully in various immigrant studies (Choi et al., 2009; A. M. Miller et al., 2006), the scale may fail to capture the conceptualization of depression in different cultural groups. For example, some groups may have a response bias toward positive affect items (E. Kim, Seo, & Cain, 2010), some items may be irrelevant for a particular group, or the meaning behind certain statements
may be interpreted differently by various cultural groups (Gonidakis et al., 2011). Lastly, social stigmatization, ethnicity, gender and age of the interviewer, and setting of the interview may affect how people respond to the questions (Gonidakis et al., 2011). This last limitation of the CES-D was partially mitigated in the present study by the exclusive online format, which almost completely eliminated the need for direct contact with the investigator.

**Depression Anxiety Stress Scale 21 (DASS-21).**

Anxiety and stress symptoms were measured through the administration of the Anxiety (DASS-A) and Stress (DASS-S) scales (Appendix B) of the Depression Anxiety and Stress Scale – 21 (DASS-21) (S. H. Lovibond & Lovibond, 1995b). The DASS-21 is a short version derived from the DASS-42. Studies have shown that the DASS-21 has similar psychometric properties to the DASS-42, with the benefit of quicker administration (Antony, Bieling, Cox, Enns, & Swinson, 1998). The DASS-21 is a 21-item, self-report measure that consists of three scales with seven items each. For the present study, participants answered only 14 items comprising the anxiety and stress subscales\(^{19}\). Answers were rated on a four-point Likert scale, from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time).

The total score resulted from adding the points obtained on each item and multiplying the total by two. The multiplication by two allows for comparisons with and the use of the norm tables for the DASS-42. The questions in the anxiety scale inquire about the experience of autonomic arousal, situational anxiety, and anxious affect over the past week. Sample questions include “I was aware of dryness in my mouth” and “I was worried about situations in which I might panic and make a fool of myself.” The stress scale measures nervous tension, agitation,

\(^{19}\) The depression scale (DASS-D) was not administered since depression symptoms were assessed by the CES-D. Using the CES-D as a measure of depressive symptomatology in the present study would allow its data to be amalgamated with or compared to the data obtained by a previous study with the same population (Costa, 2008a).
and impatience over the past week. Sample questions include “I found it hard to wind down” and “I tended to over-react to situations” (P. F. Lovibond & Lovibond, 1995a).

The DASS-21 has been used in studies with diverse populations. For example, it has been adapted and validated in Portuguese (e.g., Apóstolo, Mendes, & Rodrigues, 2007; Pais-Ribeiro, Honrado, & Leal, 2004) and Spanish (e.g., Bados, Solanas, & Andrés, 2005), with individuals belonging to various ethnic groups (e.g., Norton, 2007), as well as older adults (Gloster et al., 2008). The DASS-21 has also been assessed for use with clinical and community samples (Antony et al., 1998; Page, Hooke, & Morrison, 2007). A version of the DASS-21 in Portuguese (Appendix C) was available to participants. This version was validated by Pais-Ribeiro and colleagues (2004) and follows the same structure of items and scoring procedures used in the English version.

The psychometric properties of the English version of the DASS-21 were analysed for a clinical and a community sample (Antony et al., 1998). The study revealed an internal consistency of $\alpha = 0.87$ for the DASS-A and $\alpha = 0.91$ for the DASS-S. The scale’s concurrent validity was also analysed. The DASS-A obtained a correlation of $r = 0.84$ with the Beck Anxiety Inventory and the DASS-S obtained a correlation of $r = 0.62$ and $r = 0.64$ with Beck Depression Inventory and the Beck Anxiety Inventory, respectively. This study revealed that the DASS-21 was successful in discriminating between clinical and community samples (Antony et al., 1998). The validation of the Portuguese version conducted in Portugal obtained $\alpha = 0.74$ for the DASS-A and $\alpha = 0.81$ for the DASS-S. The same study revealed that the Portuguese DASS-21 was strongly correlated with the DASS-42. The correlations obtained between the DASS-21 and DASS-42 were $r = 0.95$ for the DASS-A and $r = 0.94$ for the DASS-S (Pais-Ribeiro et al., 2004). The psychometric properties of the DASS-A and DASS-S for the present study are
presented under the Negative Affect section of the Results chapter.

**Life Orientation Test – Revised (LOT-R).**

The LOT-R (Appendix B) assesses dispositional optimism as a personality predisposition to positively or negatively evaluate their life circumstances (Scheier, Carver, & Bridges, 1994). This measure was added to the present study as a strategy to statistically control personality characteristics that may be related to the acculturation experience and psychological adjustment (Ahadi & Puente-Diaz, 2011; Chen et al., 2008) and also affect response style, thereby confounding the results of statistical analysis. Optimism has been linked to subjective well-being and coping (Carver, Scheier, & Segerstrom, 2010) – key aspects of the present study – and it has strong positive correlations with Big Five personality traits (Sharpe, Martin, & Roth, 2011) which have been found to influence acculturation process (Benet-Martínez & Haritatos, 2005). For these reasons, it was important to discriminate whether or not findings were explained by an optimistic response style and its close relationship with negative affect and QOL, rather than by the relationships among the main variables explored.

The LOT-R contains 10 statements, of which items 2, 5, 6, and 8 are fillers. Items 1, 4, and 10 represent optimistic tendencies; and the remaining items are related to pessimistic inclinations. Sample items include “In uncertain times, I usually expect the best” or “I rarely count on good things happening to me.” All items are rated on a five-point Likert scale ranging from 0 (I disagree a lot) to 4 (I agree a lot). Total scores correspond to the sum of the non-filler items, where items 3, 7, and 9 (negative evaluation statements) are reverse-scored. The LOT-R is not intended for clinical use and has no cut-off scores.

During its initial validation study, the LOT-R had an internal consistency of $\alpha = .78$ and obtained test-retest reliability ranging from .68 (4 months) to .79 (28 months) (Scheier et al.,
A Portuguese version (Appendix C) was available to participants, which was validated in Brazil with a sample of university students (Bandeira, Bekou, Lott, Teixeira, & Rocha, 2002). Its internal consistency was $\alpha = .68$ and test-retest reliability of .61 (30 days). The psychometric properties of the Portuguese version of the LOT-R for the present study are presented under the Optimism section of the Results chapter.

**Procedures**

**Recruitment.**

Participants were recruited through e-mail, flyers, and partnership with community agencies and professionals while consistently trying to encourage snowballing (Kerlinger & Lee, 2000) at each stage of recruitment. The e-mails, flyers, and in-person presentations described the study as one examining the relationship between the ways Brazilian individuals adapt to Canada, how they feel emotionally, and their quality of life. All recruitment materials were available in English and Portuguese in order to accommodate individuals’ language preferences.

The recipients of the recruitment emails (Appendices D and E) were individuals who had listservs in their community agencies, online groups targeting Brazilian membership, publicly accessible listservs, and key members of the community who had a large social network of Brazilian individuals. The e-mails contained a link to the online survey (http://fluidsurveys.com/s/brazil/) so that interested individuals could immediately access and complete the survey. The first e-mails that were sent were directed to Brazilian individuals and organizations who collaborated with a previous research project (Costa, 2008a). Many recruitment opportunities resulted from this strategy. Individuals forwarded these e-mails to their social networks, and posted on their online community boards such as individual and group Facebook pages as well as online newspapers, magazines, personal blogs, and websites.
specializing in providing information and services to the Brazilian community. Examples of these websites and forums include: Wave Magazine, Oi Toronto (http://oitoronto.com.br/12958/saude-mental-dos-imigrantes-brasileiros-em-toronto), Centre for Support & Social Integration Brazil-Canada - CAIS, Brasileiros no Canadá (http://brasilnocanada.wordpress.com/2010/11/11/pesquisa-adaptacao-e-qualidade-de-vida-dos-brasileiros-na-grande-toronto), Tudo Aqui (http://www.tudoaqui.ca/class-diversos.html), and Facebook pages such as Brazilians (and friends) living in TO and Brasileiras de Toronto.

The flyers (Appendices D and E) had tear-off tabs containing the survey’s web address, the telephone number, and e-mail for contact. They were posted at a variety of community centers and organizations known to service the Brazilian community. These included commercial establishments, community agencies, and professional offices. These establishments were visited during hours of peak attendance and, with the authorization of the owner or manager, customers were given a brief presentation of the study and offered a take-one flyer with information to access the survey at their convenience.

Community partnerships were fostered through e-mail, telephone calls, and visits with front-line professionals, clinicians, and individuals in leadership roles. These contacts fulfilled three goals: (a) present the study (i.e., objectives, inclusion criteria, potential risks and benefits, and the structure of the online survey, including details regarding the compensation process); (b) request their assistance in encouraging potential participants to answer the survey; and (c) post recruitment flyers on their bulletin boards and leave small take-one flyers (Appendices D and E) for visitors to take with them for quick access to the research information. Some of the community organizations approached included Working Women’s Community Centre, Centre for Support & Social Integration Brazil-Canada - CAIS, the Consulate General of Brazil in
Toronto, and various departments of St. Christopher’s House. All, except for the Brazilian Consulate were located in a predominantly Portuguese-speaking area of Toronto.

Among all of the recruitment strategies utilized in this study, the majority of participants \((n = 148, 83\%)\) responded to a call for participation communicated through electronic media (email, websites, blogs, electronic forums, and social media). Figure 4 displays the distribution of recruitment sources among participants.

![Figure 4. Recruitment Sources.](image)

**Screening of Potential Participants.** Participants were screened through direct contact and online survey filters. A few individuals contacted me directly as they were unsure if their immigration status met the inclusion criteria. They received clarifications through examples of exclusion criteria, which prevented the need to disclose identifying information or immigration status. For instance, it was explained that student, work, and visitor visa statuses were not eligible, unless the person initially entered the country on one of these visas, which had subsequently expired, placing them in the category of undocumented immigrant.

The second screening stage occurred during the completion of the survey, which involved asking inclusion criteria questions at two different sections of the survey: first,
immediately after the consent page, and second, as part of the Questionnaire of Demographic Data and Immigration Context Questionnaire. Each inclusion criteria question had associated branching instructions whereby individuals who did not match the inclusion criteria had their surveys terminated. It was possible that individuals might try to change their answers as many times as necessary until they were allowed to continue answering the survey and as such receive the compensation. If this occurred, unwanted results would include inefficient use of the compensation funding and unreliability of the data collected, therefore compromising the results of the study. In order to minimize the possibility of feigned data, branching instruction were applied at the end of a page (which included multiple questions) as opposed to following each question. Additionally, the termination page had a generic message that did not allow participants to know with certainty that their participation had been terminated because of unmet inclusion criteria. These strategies likely improved data reliability, prevented payment of compensation to unusable surveys, and avoided screening participants out after they had already filled out a significant portion of the survey.

Compensation.

A compensation of $20 was available to those who fully completed the survey. This amount was equivalent to an hourly wage of an entry-level job, which seemed compatible with the estimated time to complete the survey (45 to 60 minutes). More details regarding the compensation procedures and amounts paid are available in the subsection Compensation Survey of the Data Collection section.

Data Collection.

Data were collected through FluidSurveys, a Canadian online survey engine. The main reason for choosing FluidSurveys was that it maintains collected data stored in Canada, and is
therefore subjected to Canadian national security laws, unlike many other survey engines that are based in the United States and are, therefore, subjected to the U.S. Homeland Security Act. This survey engine also provided enough flexibility to adjust survey features to the various instruments and branching options utilized.

The survey was available in English and Portuguese. Of the 180 participants, the majority \( n = 152, 84.4\% \) answered the survey in Portuguese. Twenty-eight \( (15.6\%) \) participants answered the English version. This study contained three surveys: Main Research Survey, Compensation Survey, and Summary of Results Survey. Below is a description of each of these surveys.

**Main Research Survey.** It consisted of 31 pages (English) and 30 pages (Portuguese). The English version had an extra page, which asked participants their preference for the language in which they wished to answer the survey. This survey contained seven questionnaires (see the Measures section for details) and the following ethics/process-related documents:

1. Information Letter (Appendices F and G): It explained the purpose of the research, reiterated the inclusion criteria, informed participants that participation was voluntary, and that they could withdraw at any point. It addressed potential risks and benefits of participation, assured potential participants that they were free not to answer any questions, and that they would remain anonymous and their answers confidential. The Information Letter also provided a brief explanation of the compensation process.

2. Consent Form (Appendices F and G): It ensured that potential participants read and understood the information contained in the Information Letter. If participants provided consent, the survey engine directed them to the Inclusion Criteria page; if
they did not, they were directed to the Final Page of the survey containing my contact information and a reminder of how to clean their browser history.

3. Inclusion Criteria page: This page asked all the inclusion criteria questions and directed participants to the Survey Termination Notice when they did not meet the inclusion criteria.

4. Recruitment Source Page: This page listed all of the recruitment sources utilized and asked participants to select the recruitment source that most influenced their decision to participate in this study.

5. Survey Completion Notice: Participants who answered all questions arrived at this page where there was a thank-you message and a prompt that they would be redirected to the separate Compensation Survey.

6. Survey Termination Notice: Branching instructions directed participants who did not meet the inclusion criteria to this page. Here, they saw a generic message giving the rationale for the termination and providing additional options such as a list of counselling resources, instructions to clear browser history, and the option to receive the survey results.

7. Counselling Resource Sheet (Appendices F and G): This page contained a list of counselling services available in English and/or Portuguese and listed my contact information should a participant require assistance in finding other resources.

8. Instructions to Erase your Browser History: With the objective to assist participants in protecting their privacy and confidentiality, this page provided instructions on how to erase their browser history on three different internet browsers.

9. Prompt to redirect to Summary of Results Survey: Participants who did not consent
to participate were directed to this page, where they had the option to be directed to
the separate Summary of Results Survey.

10. Final Page: This page contained my contact information and a reminder of how to
clean their browser history for those who did not consent to participate in the study.

**Compensation Survey.** This survey contained two pages which outlined details of the
compensation procedures and asked for the participant’s information regarding where to send
their compensation. The survey engine had embedded branching instructions to redirect
participants who fully completed the Main Research Survey to this separate questionnaire
(Compensation Survey - Appendices F and G). In order to protect privacy as much as possible,
participants had four choices of compensation, each requiring different levels of personal
information disclosure. The four options and the kind of personal information required were as
follows:

1. *Payment by cheque:* Name (or pseudonym) and address to which the cheque should
   be mailed;

2. *Payment via PayPal:* E-mail address associated with an existing PayPal account
   (participants who did not have a PayPal account had to create one associated with the
   e-mail address provided);

3. *Donation to a preferred charity:* Choose from a list of pre-selected charities that
   served the Brazilian community or provide the name and address of the charity to
   which they wished to make a donation;

4. *Decline Compensation:* No personal information was required.

The last two options were available in case participants wished to remain completely
anonymous. They were assured that their contact information would not be associated with their
survey answers as the page where they would enter their name and address or e-mail was part of a separate survey. Please refer to Appendices F and G (Information Letter - Compensation and Consent Form - Compensation) for further information.

A few strategies were implemented to guarantee that participants had fully completed the survey prior to directing them to the Compensation Survey. First, within the Main Research Survey, all questions were categorized as ‘Required,’ that is, participants could only proceed to the next page if they had answered all questions of the current page. This intended to prevent participants from skipping through pages until they reached the compensation page, without having fully completed the survey. This strategy alone, however, would violate the individual’s right to not answer certain questions. Therefore, the answer option ‘Prefer not to answer’ was added to all questions. Exceptions to this rule were the informed consent questions and questions related to the inclusion criteria as these were pre-requisites to participating in the research.

The majority of participants who completed the Main Research Survey chose to access the separate compensation survey \((n = 153, 85\%)\). Of these entries, 10 (7\%) were not processed because they either did not include answers to the compensation questions \((n = 5)\), were duplicate entries \((n = 4)\), or provided an international address \((n = 1)\). The remaining 93\% \((n = 143)\) of entries were processed amounting to $2,860.00. Most payments were made by cheque \((n = 126, 88\%)\) to individual participants \((n = 97, 68\%)\). Of the mailed cheques, three were returned to the sender with a Canada Post notice indicating that the addressee had/was ‘Moved/Unknown.’ Since there was no other form of communication with participants aside from the information they provided, it was not possible to verify and obtain their accurate mailing address. I made 17 (12\%) PayPal payments and posted 29 payments to various charities. *Table 1* demonstrates the breakdown of charity payments.
Table 1
Compensation Donated to Charities

<table>
<thead>
<tr>
<th>Charity</th>
<th>Donations</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Christopher House</td>
<td>16</td>
</tr>
<tr>
<td>CAIS - Centre for Support &amp; Social Integration Brazil-Canada</td>
<td>7</td>
</tr>
<tr>
<td>CAIS - Oficina de Lingua para Criancas</td>
<td>1</td>
</tr>
<tr>
<td>Abrigo Centre</td>
<td>1</td>
</tr>
<tr>
<td>Destiny &amp; Dominion Word Ministries</td>
<td>1</td>
</tr>
<tr>
<td>Generous Hearts</td>
<td>1</td>
</tr>
<tr>
<td>JASSG</td>
<td>1</td>
</tr>
<tr>
<td>Toronto Humane Society</td>
<td>1</td>
</tr>
<tr>
<td>Total Number of Donations</td>
<td>29</td>
</tr>
<tr>
<td>Total Donation Value</td>
<td>$580.00</td>
</tr>
</tbody>
</table>

Summary of Results Survey. This survey contained two pages where participants indicated whether they wished to receive a summary of the survey via e-mail and where they received information on how to clear their browser history (see Appendices F and G). Of the 117 individuals who were redirected to this page, 97 (83%) indicated that they wished to receive a summary of the survey and 20 either declined this option ($n = 13, 11\%$) or did not provide an answer to this question ($n = 7, 6\%$).

Data preparation and quality assurance.

Before data analysis was possible, three strategies were taken to ensure that the data was reliable:

1. Data preparation: involved transforming some text answers (e.g., ‘other, please specify’) into numerical values, recoding the answer options of some questions to reflect reversed scoring rules, and recoding all ‘Prefer Not to Answer’ into missing data (value of 99).
2. **Missing data analysis and management (multiple imputations):** A preliminary visual scanning of the data revealed that there were missing data in the 245 surveys that met consent and inclusion criteria. For these, the amount of missing data per scale per survey was calculated as well as the amount of missing data within each scale. Missing data were addressed through five steps. First, the amount and percentage of missing data per scale for each of the participants was calculated. Second, total scores per scale per participant were computed for cases where the missing data were equal to or less than 30%. Total scores resulted from multiplying the mean of the non-missing answers by the total number of items. Additional procedures were necessary depending on scale-specific total score calculation instructions (e.g., DASS and QOLP). Total scores were not computed for scales with more than 30% of missing data. Third, the number of missing total scores per person was identified, which resulted in the deletion of cases that had five or more missing total scale scores out of the 12 total scale scores ($n = 62$). Fourth, a within-scale analysis revealed that only half of the scales had missing data (i.e., Integration, CES-D, QOLP, QOLP Control, QOLP Opportunity, and LOT-R) and that the amount of missing data was less than 15% per scale, which met the criteria for multiple imputations. The fifth and final step involved using multiple imputations to calculate total scores for those participants who were missing less than five total scale scores ($n = 183$). A series of five imputations was conducted through SPSS and the pooled mean of the multiple imputations was used to replace the missing total scores. The means pre- and post-imputations remained very similar for the six variables that were submitted to multiple imputation procedure. It is of note that the Questionnaire of Demographic
Data, Short Version (QDD-S) and the Immigration Context Questionnaire, Revised (ICQ-R) also contained missing data; however, since these questionnaires did not yield a total score, missing data was not replaced. Instead, listwise deletion was used whenever variables from these questionnaires entered the analyses.

3. Data quality assurance: Three strategies to detect insufficient effort responding (IER) were considered as ways to guarantee the quality of the data collected: (a) unreasonably short completion time; (b) inconsistent responding, and (c) uniform responding (see Huang, Curran, Keeney, Poposki, & DeShon, 2012 for a review of these strategies). Cases presenting one or more of these conditions were to be deleted. Due to a problem in the way the survey engine recorded completion time, it was not possible to use this strategy as a measure of IER (FluidSurveys, personal communication, November 22, 2012). Inconsistent responding was verified by cross-checking responses to items that were asked twice throughout the survey. These were inclusion criteria questions, such as age, time lived in Brazil, and age at immigration, to cite a few. Uniform responding was detected for cases were the same answer (e.g., ‘a’ or ‘b’ for all questions) was given throughout one or more scales or to opposing items within the same scale (e.g., same answer to LOT-R items “I'm always optimistic about my future” and “I rarely count on good things happening to me”). As a result of these IER indicators, I deleted three (1.2%) entire surveys, one presenting primarily uniform responding and two with both uniform and inconsistent responding.

As previously described, the data preparation and quality assurance procedures resulted in a final sample of 180 participants. However, the listwise deletion described in step two above
led to the exclusion of seven cases from the final regression analyses as those cases did not have scores on the MHH (Mental Health History) variable. With respect to demographic and immigration context characteristics, there were no statistical differences between the 173 participants in the final analyses and the seven cases that were excluded through listwise deletion as detected by non-significant Chi-square tests (all $\alpha > .05$).

**Data analyses.**

Data analyses involved various steps all of which were performed either on IBM SPSS Statistics 21 or Microsoft Excel 2010. First, descriptive statistics of the different measures were obtained. Such statistics included frequencies, means, standard deviations, skewness, kurtosis, and reliability. These provided a description of the sample, scale properties, and distribution of scores. Second, principal component analyses and reliability analyses identified whether a set of variables could be combined into a single variable. In some cases, $z$ score conversions were executed in order to standardize scores across various scales. Where applicable, a composite score was created by adding the scores of the combined variables. Third, crosstabulations analyses (Cramér’s $V$), correlations (Pearson’s $r$), eta-squared calculations, and multiple regression analyses explored the relationships among key variables. Fourth, cluster analyses identified patterns of combination of acculturation strategies that participants used. Fifth, a series of procedures verified if the relationship between the main independent and dependent variables met the underlying assumptions for regression analyses and computed associated data transformations. Sixth, a pre-determined sequence of regression analyses tested mediation and moderation models according to the steps proposed by Baron and Kenny (1986). Lastly, regression analyses and analyses of covariance (ANCOVA) explored which acculturation patterns were associated with favourable well-being. The last two steps answered the main
research question of this study. The next section provides more details of steps five and six and outlines the parameters with regard to sample size, power, and significance levels for this study.

**Analysis of regression assumptions and related data transformations.** The dependent variable Negative Affect (NA) was highly positively skewed, with very few participants experiencing higher levels of negative affect. This raised concerns with regard to violations of assumptions of multivariate normality, linearity, and homoscedasticity of the relationships between the variables entered in the multiple regression analyses. A trial set of analyses revealed that these assumptions were violated in all analyses, which compromised the reliability of results.

Variable transformations were performed to normalize NA (dependent variable) and correct the aforementioned violations. For positively skewed variables, two types of transformations are more popular: square root and log transformations. These transformations cannot be performed if the dependent variable includes a value of zero. Since NA scores were part of a standardized scale, and therefore included a value of zero, it had to be rescaled before performing transformations. Rescaling of NA scores in order to include only values greater than zero was achieved by adding a constant value of four to all NA scores. Next, square root and log transformations were applied to the rescaled variable. The square root transformation did not change the properties of the dependent variable; NA remained highly skewed. However, the log transformation was successful in normalizing the distribution of negative affect scores. After completion of the log transformation, the underlying assumptions for regression were checked again by plotting two graphs and conducting a Kolmogorov-Smirnov test:

1. Normal P-P plot of residuals versus predicted values: This graph showed data points symmetrically distributed along its diagonal line. This pattern indicated that the
normality assumption was met.

2. Scatterplot of the standardized regression residuals as a function of regression predicted values: The resulting random cloud of dots represented that the linearity and homoscedasticity assumptions were met.

3. Kolmogorov-Smirnov test: The test was not significant ($\alpha = .209$) indicating that the log-transformed NA variable was normally distributed.

   All of the assumptions for regression analyses were met; therefore, the final mediation and moderation analyses used the log-transformed negative affect variable. Since log transformations of the dependent variable were sufficient to meet the underlying assumptions for regression analyses, it was not necessary to conduct transformations of the independent variables. Additional regression analyses with QOL and SLCI as dependent variables met all regression assumptions without any data transformations.

   Lastly, the data were checked for multicollinearity. Even though multicollinearity does not seem to cause problems in mediation/moderation (Hayes, Glynn, & Huge, 2011; Whisman & McClelland, 2005), the collinearity statistics for the present analysis revealed no values close to zero in the tolerance column and no values close to 10 in the VIF column, which indicated that multicollinearity was not present.

**Mediation model.** Baron and Kenny’s (1986) methodology proposes a sequence of three regression analyses to test a variable’s mediating role. Figure 5 depicts the path diagram for this study’s mediation. The sequence of steps for the mediation model (Kenny, 2012) is listed below.
Figure 5. Mediation path diagram.

1. First step: regression analyses with the independent variable (acculturation strategies and profiles) as predictor of the dependent variable (Negative Affect – NA) (path ‘c’), while controlling for variables found in this study to be moderately to strongly correlated with NA (Controls = QOL Control, Optimism, Mental Health History) (path ‘d’). The results should demonstrate that acculturation predicts NA.

2. Second step: regression analyses with the independent variable (acculturation strategies and profiles) as predictor of the variable thought to be the mediator (Quality of Life - QOL) (path ‘a’), while adjusting for Control Variables (path ‘d’). The results should demonstrate that acculturation predicts QOL.

3. Third step: regression analyses with the independent variable (acculturation strategies and profiles) and mediating variable (QOL) (path ‘b’) as predictors of NA, while adjusting for Control Variables (path ‘d’). The results should demonstrate that the mediator (QOL) continues to predict NA.

4. Fourth step: using the regression from step three, verify if the effect of acculturation on NA, while controlling for QOL is zero. An effect of zero demonstrates that QOL completely mediates the relationship between acculturation and NA. Kenny (2012)
proposes that the satisfaction of all four conditions denotes a complete mediation, whereas if only the first three conditions are met, then a partial mediation is present.

**Moderation model.** To test moderation, Baron and Kenny (1986) proposed to run a regression with simple effects\(^{20}\) of predictors (acculturation profiles) (path ‘a’) and the variable thought to be the moderator (QOL) (path ‘b’) as well as with the interaction term (the product between the predictor and the mediator) (path ‘c’). For the present study, the regression analysis also contained control variables found in this study to be moderately to strongly correlated with NA (Controls = QOL Control, Optimism, Mental Health History; path ‘d’). Figure 6 corresponds to the path diagram for this study’s moderation analysis. As a rule, to confirm the moderating role of QOL, the interaction term (QOL x acculturation profiles) has to successfully predict the dependent variable (NA) (Kenny, 2011).

![Moderation path diagram](image)

*Figure 6. Moderation path diagram.*

**Sample size, power, and significance levels.** A minimum of 15 participants per predictor is required for reliable regression analysis (Stevens, 2002). In order to guarantee this minimum, the control variables entered in regression analyses were limited to those that were moderately to
strongly correlated with the dependent variable (NA). These variables were QOL Control, Mental Health History, and Optimism\textsuperscript{21}. The excluded variables were: Reasons for leaving Brazil, Reasons for choosing Canada, QOLP Opportunity, Satisfaction with Life in Canada Index, and Culture Compatibility Index. After the exclusion of these variables, the maximum number of predictors used in regression analyses was 10 (as acculturation profiles was recoded into three dummy variables) resulting in a ratio of 17 subjects per variable, which is slightly above the minimum required.

With regard to the significance level, Bonferroni corrections may be used to adjust alpha levels when conducting multiple statistical analyses with the same data. There are, however, conflicting opinions, inconsistent uses, and a lack of guidelines when it comes to applying Bonferroni corrections (Cabin, 2000). Nakagawa (2004) advises against using Bonferroni corrections to alpha levels when conducting multiple analyses to the same data as a means to protect statistical power and decrease publication bias. Given the lack of guidelines for Bonferroni corrections and their risk of reducing power, alternative strategies to safeguard the reliability of results were used. In addition to reducing the number of predictors in the analysis to include only those moderately to strongly correlated with the dependent variable, effect sizes ($R^2$ Change) were provided whenever applicable to add meaning to the results (Nakagawa, 2004). With these strategies in place, maintaining the alpha level at .05 throughout the study seemed appropriate.

Cronbach’s alpha reliability coefficient measured scales’ internal consistency. Scales with Cronbach’s alpha of .70 were considered acceptable (Nunnally, 1978). Further

\textsuperscript{20} For differences between main effects (ANOVA) and simple effects (linear regression) see Hayes, Glynn and Huge (2011, p. 6)

\textsuperscript{21} Refer to the Results section, Table 9, for a detailed correlations table.
categorization included: “_ > .9 – Excellent, _ > .8 – Good” (George & Mallery, 2003, p. 231).

**Ethical considerations.**

*Risks and benefits*. This study involved a moderate risk since it addressed symptoms of depression, anxiety, and stress, and included, among others, participants who had an undocumented immigration status. Some questionnaires had questions that could be perceived as a source of discomfort because they may have led participants to reflect on their experience of immigration or connect with negative emotions. Several strategies addressed this risk. First, this study utilized research instruments that have been used with non-clinical populations and most of them, except for the QOLP, were available in the public domain (Appendices B and C). While these instruments contained symptoms of depression, anxiety, and stress, they did not ask questions about suicidal ideation, for example. Second, participants were assured that if they experienced emotional discomfort they could withdraw from the study or stop answering the survey and return to it later. Third, the ‘Counselling Resource Sheet’ (Appendices F and G), contained a number of agencies that offer mental health services in Portuguese and/or English. This resource sheet also suggested that participants contact me if they needed any assistance.

Another potential risk associated with this study was that undocumented participants could fear to have their citizenship status disclosed if they participated in the study. Numerous strategies were in place in order to lessen this risk. First, the survey engine was configured to not collect IP addresses. This ensured that answers could not be traced back to the computer where they originated. Second, participation in the survey was strictly anonymous. If participants opted to receive compensation, they were asked to provide a pseudonym and mailing address or their e-mail address in a separate survey not linked to the Main Research Survey and where there
were no questions related to immigration status. Alternatively, participants had the option not to receive their compensation or to donate it to their preferred charity.

With regard to benefits, participants were informed that they would be contributing to the production of knowledge on mental health and immigration issues faced by our community. As such, participants could benefit from contributions this research might make to the understanding of the mental health issues in our community and ideas for mental health services.

**Conflicts of interest.** There were no conflict of interest; however, I am Brazilian and have personal experience with issues such as immigration and acculturation to Canada. This research topic seemed relevant to my experience as an immigrant and observations of other Brazilians trying to adjust to Canada. My emotional connection with the topic inspired me to ask questions from lived experience. Naturally, some questions might have been left out and some others might not have been as pertinent. However, there were consistent efforts to seek advice from my thesis supervisor, committee members, and statisticians. This allowed me to base this research in theory, identify gaps in the theory, strive to avoid research bias, and ensure that the statistical methods utilized were rigorous so that findings were an accurate depiction of participants’ experiences. The nature of my connection with the research population and research topic offered various benefits: (a) pioneering a study never before conducted within the Brazilian community; (b) having the ability to access the community in a culturally sensitive manner; (c) increasing the chances of being accepted as a researcher by the community; and (d) increasing the chances of offering an empathic approach to communications during the research process.

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22 This study received ethics approval from the Social Sciences, Humanities and Education Research Ethics Board of the University of Toronto (protocol reference # 25467).
Chapter 4:

Results

This chapter describes the results of this research obtained through the procedures outlined in Chapter 3, Data Analyses subsection. Of the ten sections in this chapter, the first seven contain the statistics related to each measure and preliminary exploratory analyses of the relationship among all the variables. These seven sections are: demographic data; immigration context; acculturation strategies; quality of life; negative affect; optimism; and exploratory correlation analyses. The final three sections describe the results related to the main research question and are as follows: mediation analysis, moderation analysis, and acculturation and well-being. A summary of the main study results is presented at the end of the chapter.

Demographic Data

The Questionnaire of Demographic Data, Short Version (QDD-S) collected information on participants demographic, socioeconomic, and cultural identification characteristics. The section entitled ‘Final sample of participants’ of the Research Method chapter provided a brief overview of the sample’s demographic characteristics. Here, these characteristics are presented in more detail.

Demographic characteristics.

The final sample of participants comprised 180 individuals, of which nearly two thirds (n = 124, 68%) were female. All participants lived in the Greater Toronto Area. Their ages ranged from 16 to 63 years old with a median age of 35 years old. Among the participants, 81% (n = 146) were in a relationship, mainly in a legal marriage (n = 103, 70.5%). Of those not in a relationship, two thirds were single (n = 22, 64.7%) and one third was either separated or divorced (n = 12, 35.3%). Most participants came from the Southeast Region of Brazil (n = 128, 71.1%). The Northeast (n =
21, 11.7%) and South ($n = 19, 10.6\%$) regions had similar representation. The Center and North regions accounted for 12 (6.7\%) of the participants.

The majority of participants were documented ($n = 164, 91.1\%$) and 8.9\% ($n = 16$) did not have their immigration documents. Of the documented participants, 108 (65.9\%) were permanent residents or landed immigrants, 53 (32.3\%) were Canadian citizens, and three (1.8\%) were refugee claimants.

**Socioeconomic status.**

The sample’s socioeconomic characteristics were analysed in terms of education, work, and income. More than half of participants had completed undergraduate studies ($n = 100, 55.9\%$), followed by 36 individuals (20.1\%) who had completed graduate studies, in the form of a master’s, doctoral, or professional degree (e.g., M.D.). The remainder one third of participants had either some college education and/or a certificate in a specific trade ($n = 23, 12.9\%$) or education ranging from elementary to high school ($n = 20, 11.2\%$). Figure 7 depicts the education background of this sample.

*Figure 7. Sample's education level.*
Nearly half of respondents (n = 79, 44.1%) had a job in the field in which they had studied or trained. Approximately 27% (n = 48) of participants were working outside of their field. Twenty six (14.5%) were studying, 14 (7.8%) were stay-at-home caregivers, and 12 (6.7%) were unemployed. The professional field with a larger number of representatives was business (n = 48, 28.2%), including administration and finance. Arts and humanities (n = 32, 18.8%) and health sciences (n = 25, 14.7%) followed in second and third places respectively.

The sample’s individual annual income ranged from ‘less than $20,000’ to ‘$100,000 or higher.’ One third of the participants (n = 57, 37%) was earning ‘less than $20,000.’ When considering household annual income, the largest concentration of participants (n = 46, 27.9%) was in the ‘$40,000-$59,999’ bracket, followed by 36 individuals (21.8%) with annual household income of ‘$100,000 or higher.’

Cultural identification.

With regard to ethnicity, just over half of participants (n = 97, 56.4%) self-identified as European Brazilian, 39 (22.7%) as Latin American, 13 (7.6%) as African Brazilian, 10 (5.8%) as Aboriginal Brazilian, and 13 (7.6%) chose another ethnicity such as ‘just Brazilian,’ Asian Brazilian, or Brazilian of a middle-eastern origin. When asked about their cultural identification, almost the entire sample indicated to maintain a Brazilian identity at least to some extent. For example, two thirds of participants (n = 120, 66.7%) answered that they considered themselves to be ‘Brazilian’ and approximately one third (n = 56, 31.1%) indicated to feel that they are Brazilian Canadian. Four individuals (2.2%) self-identified as being Canadian. The majority of participants who were in a relationship had a Brazilian partner (n = 108, 74%). Others were in a relationship with a Canadian (n = 17, 11.6%) or a European partner (n = 14, 9.6%), including 7 who were in a
relationship with a Portuguese person. Seven individuals (4.8%) had a partner from Latin America or another ethnicity.

Immigration Context

The Immigration Context Questionnaire, Revised (ICQ-R) asked questions about participants’ pre- and post-immigration circumstances as well as mental health history thought to impact choices of acculturation strategies and negative affect predisposition. I divided the results of this measure into five categories: pre-acculturation, during-acculturation, social support network, attitude toward Canadian culture and life in Canada, and history of mental health difficulties.

Pre-acculturation category.

All participants were born in Brazil. The length of time respondents lived in Brazil prior to emigrating ranged from 10 to 50 years, with a mean of 28.85 years ($SD = 7.43$). Participants’ ages at the time of immigration to Canada ranged from 15 to 51 years of age, with a mean of 29.43 years ($SD = 7.21$). The reasons to leave Brazil varied widely (see Figure 8), with the top four reasons being seeking safety ($n = 45, 25.1\%$), accompanying a parent or a spouse ($n = 30, 16.8\%$), seeking better job opportunities ($n = 27, 15.1\%$), and seeking better opportunities for the family ($n = 23, 12.8\%$).
When variables related to quality of life, such as safety, better job opportunities and better opportunities for the family were grouped together, then more than half of participants (n = 102, 57%) decided to leave Brazil in hope of improving their quality of life.

The main reasons to choose Canada as their destination included the belief that it was easy to receive a visa or be accepted as an immigrant (n = 39, 22%); the availability of better professional opportunities (n = 34, 19.2%); appreciation of the culture (n = 25, 14.1%); the need to accompany someone (n = 20, 11.3%); and the wish to reunite with family members (n = 18, 10.2%). When considering similar variables together, the main reason for choosing Canada was to improve their quality of life (n = 54, 30.5%). Figure 9 displays the distribution of reasons to choose Canada.

*Figure 8. Reasons to leave Brazil.*
Almost half of respondents \((n = 75, 42.1\%)\) intended to become Canadian citizens, while 48 (27\%) planned to stay for a limited time. The remainder of participants either had no specific plan \((n = 36, 20.2\%)\) or planned to stay for a long time \((n = 17, 9.6\%)\).

In terms of English proficiency before immigrating, nearly two thirds of participants \((n = 115, 63.9\%)\) had at least an intermediate command of the language. Sixty-five individuals (36.1\%) indicated that they had beginner knowledge of English prior to moving to Canada. With regard to employment in Brazil, two thirds of respondents \((n = 117, 66.1\%)\) had a job in their field of study or training. The remaining third of participants either had a job in another field \((n = 33, 18.6\%)\) or had never held a job in Brazil \((n = 27, 15.3\%)\).

Crosstabulation analysis revealed a moderate relationship between participants’ reasons for leaving Brazil and reasons to choose Canada (Cramér’s \(V = .476, p = .000\)). As expected, the majority of individuals who chose Canada to improve their quality of life also sought to leave Brazil for the same reason \((n = 40, 74.1\%)\), and 81\% \((n = 17)\) of people who did not come to Canada by choice did not leave Brazil by choice. Correlations among scale variables revealed that
Length of Life in Brazil and Age of Immigration were highly correlated \((r = .97, \alpha = .00)\), indicating that most people came directly to Canada upon leaving Brazil.

**During-acculturation category.**

The time participants had been living in Canada ranged from one to 45 years, with a median of four years, indicating that the majority was relatively new to Canada. Participants were divided in three groups each corresponding to approximately one third of the distribution of the number of years. Just over one third of participants \((n = 68, 37.8\%)\) had been living in Canada for up to two years. Nearly one third of participants \((n = 57, 31.7\%)\) had been living in Canada between three and seven years, and nearly one third of respondents \((n = 55, 30.6\%)\) had been here from eight to 45 years.

Portuguese was the language most spoken at home for over two thirds of participants \((n = 124, 68.9\%)\) while English was the predominant language spoken outside the home for nearly two thirds \((n = 112, 62.2\%)\) of the sample. Almost all participants were fluent in Portuguese, \((n = 174, 96.7\%)\) and most participants had a command of English that ranged from intermediate to fluent. More than half indicated to be proficient in English \((n = 102, 56.7\%)\), approximately 21% \((n = 37)\) indicated to have an advanced command of the language, and approximately 19% \((n = 34)\) noted that their English was intermediate. More than half of participants \((n = 106, 60.2\%)\) obtained their first job in Canada in a field other than the one in which they had been trained in Brazil.

Crosstabulation analyses revealed that there was a weak relationship between obtaining the first job in their field and fluency in English (Cramér’s \(V = .304, p = .000\)). In particular, the majority of participants who obtained their first job in the field in which they had been trained, had English skills between advanced \((n = 17, 40.5\%)\) and fluent \((n = 18, 42.9\%)\) when they immigrated to Canada.
Social support network.

The vast majority of participants \( n = 148, 83.6\% \) indicated to have a social support network. Approximately 73\% indicated that their support network was comprised of Brazilian individuals. This number was significantly higher than the Canadian group, which was the second largest group of supporters \( n = 16, 9.6\% \). Over two thirds of participants were not accessing any community services available to the Brazilian community \( n = 137, 77.4\% \).

There was a strong correlation between having social support and the nationality of the social support (Cramér’s \( V = .833, p = .000 \)). In particular, participants who reported having a social support network relied mainly on Brazilian individuals for such support \( n = 118, 79.7\% \).

Attitude toward Canadian culture and life in Canada.

Half of the participants \( n = 88, 49.4\% \) felt that their expectations prior to moving to Canada had been met (‘pretty much’ and ‘very much’ response options), while 17\% \( n = 31 \) felt that their expectations had either not been met at all or a little bit. The majority of participants indicated that Brazilian and Canadian cultures were not at all or a little bit alike \( n = 141, 79.2\% \). Only 4\% \( n = 7 \) believed that the two cultures were alike. The sample was almost evenly divided when it came to their opinion with regards to the compatibility between Brazilian and Canadian cultures. Just over half of the participants \( n = 95, 53.7\% \) felt that the two cultures were at least somewhat compatible, while the remaining nearly half \( n = 82, 46.3\% \) felt that the two cultures were a little bit to not at all compatible. Figure 10 depicts the sample’s opinions on the compatibility between the two cultures.
Almost everyone ($n = 162, 90\%$) felt at least somewhat welcome in Canada. Of these, 51\% felt pretty much welcome to Canada. Most people ($n = 153, 85\%$) were at least somewhat satisfied with their life in Canada. Only 15\% ($n = 27$) of participants were a little bit or not at all satisfied.

Figure 11 depicts the sample’s satisfaction with life in Canada. Despite feeling satisfied with their life in Canada, only approximately 27\% ($n = 48$) of participants had firm plans to continue to live here. The other 73\% were either unsure ($n = 97, 54.2\%$) or had firm plans to return to Brazil ($n = 34, 19\%$).

Figure 10. Sample's perception of compatibility between Brazilian and Canadian cultures.
Crosstabulation analysis revealed that feeling welcome in Canada was weakly, but significantly correlated with participants’ self-reported ethnicity (\(\Phi = -.159, p = .037\)). More than half of the participants \(n = 12, 66.7\%\) that did not feel welcome in Canada (response options a little bit and not at all) self-identified as being of non-European descent. Crosstabulation analysis also demonstrated that participants’ satisfaction with life in Canada was moderately related to feeling that their pre-immigration expectations had been met (Cramér’s \(V = .552, p = .000\)), feeling welcome in Canada (Cramér’s \(V = .474, p = .000\)), and to having plans to return to Brazil (Cramér’s \(V = .339, p = .000\)). Over two thirds of participants \(n = 28, 71.8\%\) who reported being very much satisfied with their life in Canada also reported that their expectations had been very much met. All of the participants \(n = 39\) who felt very much satisfied with their life in Canada responded pretty much or very much to feeling welcome in Canada. Conversely, all participants \(n = 7\) who were not at all satisfied with their life in Canada reported feeling somewhat to not at all welcome in Canada. Half of those who were very much satisfied with their life in Canada indicated that they did not have any plans to return to Brazil \(n = 21, 53.8\%\).

Culture compatibility was weakly related to having expectations met (Cramér’s \(V = .233, p = .001\)), feeling welcome to Canada (Cramér’s \(V = .221, p = .005\)), and feeling satisfied with life in Canada (Cramér’s \(V = .250, p = .000\)). However, there was a moderate correlation between feeling that Brazilian and Canadian cultures are compatible and feeling that they are alike (Cramér’s \(V = .358, p = .000\)). For example, 89\% \(n = 25\) of individuals who responded that the two cultures are ‘not at all’ compatible also responded that they are ‘not at all’ alike.

A principal component analysis with Varimax rotation and Kaiser normalization verified whether the variables demonstrating attitudes toward Canadian culture and satisfaction with life in Canada could be reduced to fewer composites. This analysis resulted in two components.
Additional reliability analysis aided in the decision of what variables to keep in each component. This procedure resulted in the following two components:

1. *Satisfaction with Life in Canada Index (SLCI).* Composite score of three questions:
   - Do you feel that the expectations you had before moving to Canada have come, are coming, or will come true?
   - Do you feel welcome in Canada?
   - Are you satisfied with your life in Canada?

   The internal consistency of the new composite was good ($\alpha = .85$); therefore, I calculated the new composite score Satisfaction with Life in Canada Index (SLCI) by adding scores of the three variables. Descriptive analyses of the SLCI revealed that its scores were negatively skewed, indicating that most individuals were satisfied with their life in Canada. Scores ranged from 3 to 15, with a median of 11 (See Figure 12).

*Figure 12. Distribution of Satisfaction with Life in Canada scores.*
2. *Culture Compatibility Index.* Composite score of two questions:

- Are Brazilian and Canadian cultures alike?
- Are Brazilian and Canadian cultures compatible?

The internal consistency of the new factor was acceptable ($\alpha = .70$), therefore I calculated the new composite score Cultural Compatibility (CCI) by adding scores of the two variables. Descriptive analyses indicated that the CCI was positively skewed, demonstrating that most individuals perceived a lower compatibility between Brazilian and Canadian cultures. Scores ranged from 1 to 10, with a median of 4. (See Figure 13, next page).

![Figure 13. Distribution of Culture Compatibility Index scores.](image)

Satisfaction with Life in Canada was moderately correlated with participants’ perceptions of compatibility between Brazilian and Canadian cultures ($r = .347$, $\alpha = .000$). The positive relationship indicated that the more participants perceived the two cultures to be compatible, the more satisfied they were with their lives in Canada.
History of mental health difficulties.

Participants responded to a series of questions regarding previous formal diagnoses and various form of mental health treatment. I computed endorsements of any of these questions as an indication of a history of mental health difficulties. Approximately 58% ($n = 102, 57.6\%$) of participants reported such a history. Of these, the vast majority had received a formal diagnosis ($n = 84, 84.8\%$), half had engaged in treatment with a mental health professional ($n = 54, 52.9\%$), and just over half ($n = 60, 59.4\%$) had taken medication in the past to treat a mental health issue. Past hospitalization and current medication use were minimally reported. Only $8.8\% (n = 9)$ of participants with a history of mental health difficulties had been hospitalized over the years and only $16\% (n = 16)$ were currently taking medication for mental health issues.

Of those participants who received a formal diagnoses ($n = 84$), 37 (44%) indicated having received a diagnosis of depression, 54 (64.3%) of anxiety, and 56 (66.7%) of stress. Figure 14 demonstrates the history of mental health diagnoses per country where diagnoses were received. This graph also shows that depression was the least frequently endorsed diagnosis over participants’ lifetimes.

![Figure 14. Mental health diagnosis per country.](image-url)
Crosstabulation analysis revealed that the diagnosis most related to a history of taking psychotropic medication was anxiety. Approximately 67% \((n = 40)\) of those taking psychotropic medication had a diagnosis of anxiety \((\text{Phi} = .311, p = .002)\) while 58.3\% \((n = 35)\) had a diagnosis of depression \((\text{Phi} = .545, p = .000)\). The relationship between stress and medication was not significant \((\text{Phi} = -.025, p = .805)\).

**Mental Health History (MHH).** I used a series of procedures to investigate whether the questions related to a history of mental health difficulties could be reduced into fewer composites. Questions 24 to 30 of the ICQ-R were utilized for this analysis. I conducted a series of five steps. First, I transformed the scores of all seven variables into ‘0 = not endorsed,’ and ‘1 = endorsed.’ Second, a principal component analysis with Promax rotation and Kaiser normalization resulted in two components which, due to being moderately correlated \((r = .409)\), could be combined into one total score. Third, reliability analysis confirmed that all variables could be kept in the resulting composite (Cronbach’s Alpha = .789). Next, the number of missing values among the seven variables was calculated. There were seven cases with missing values. Lastly, for only those individuals who did not have any missing values \((n = 173)\), I calculated the Mental Health History (MHH) composite score by adding the scores of the seven variables.\(^{23}\)

The MHH scores ranged from 0 (no history of mental health problems) to 7 (endorsement of all variables that composed the MHH). The distribution was positively skewed with a median score of 1.0. These results demonstrated that there were more individuals reporting lower than higher endorsement of a history of mental health difficulties (See Figure 15).

\(^{23}\) I did not use multiple imputations for this new composite score as it was based on factual data as opposed to a rating scale. I handled missing data by applying listwise deletion whenever this variable entered analyses.
The Acculturation Strategies Scale – ASSc collected information regarding participants’ acculturation strategies. I investigated the properties of the four subscales of the ASSc as well as whether there were any patterns in the ways that participants combined the various strategies. The following pages contain the results of these analyses.

Integration strategy subscale.

The results of reliability analysis demonstrated that the Integration Strategy subscale obtained an acceptable reliability coefficient of $\alpha = 0.73$ based on its original eight items. The total scores for this scale were normally distributed with a non-significant Kolmogorov-Smirnov test ($\alpha = .078$). Scores ranged from 1.5 to 5, with a mean score of $M = 3.42$ ($SD = .70$).

Assimilation strategy subscale.

The Assimilation Strategy subscale demonstrated good internal consistency ($\alpha = 0.82$). All 14 items obtained good corrected item-total correlation. The Assimilation scores were normally
distributed (Kolmogorov-Smirnov test: $\alpha = .07$) with the minimum and maximum scores being 1 and 4.43 respectively. The mean score for Assimilation was $M = 2.76$ ($SD = .65$).

**Separation strategy subscale.**

The reliability analysis of the Separation Strategy subscale demonstrated good internal consistency ($\alpha = 0.78$). All 14 items were retained. The Separation Strategy scores were normally distributed (Kolmogorov-Smirnov test: $\alpha = .20$). Separation scores ranged from 1.4 to 4 with a mean score of $M = 2.70$ ($SD = .63$).

**Marginalization strategy subscale.**

The Marginalization Strategy subscale obtained good internal consistency ($\alpha = 0.82$). The analysis results indicated that all 14 items should be kept in the final subscale. The Marginalization scores were not normally distributed (Kolmogorov-Smirnov test: $\alpha = .000$). The distribution was positively skewed with scores ranging from 1 to 3.43 and a median score of 1.54.

**Absence and predominance of acculturation strategies.**

Possible total scores for all acculturation strategies subscales ranged from 1 to 5. The lowest score on a subscale reflected a total disagreement with all statements of a specific strategy; therefore, it was conceptualized as the absence of that specific strategy in a person’s repertoire of acculturation strategies. *Table 2* demonstrates that some individuals obtained the lowest possible score on two of the acculturation strategies subscales, namely Assimilation ($n = 2, 1.11\%$) and Marginalization ($n = 22, 12.22\%$).
Table 2

Acculturation Strategies With Lowest Subscale Scores

<table>
<thead>
<tr>
<th>Acculturation Strategy Subscale</th>
<th>Lowest Total Score</th>
<th>Frequency</th>
<th>% of Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Assimilation</td>
<td>2</td>
<td></td>
<td>1.11</td>
</tr>
<tr>
<td>Separation</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Marginalization</td>
<td>22</td>
<td></td>
<td>12.22</td>
</tr>
</tbody>
</table>

These results demonstrated that various combinations of acculturation strategies were present. Scores on two or more scales indicated that they may adopt various strategies. Presence of the lowest score demonstrated that a person perceived that they did not subscribe to that strategy at all. The fact that only two scales had cases where the lowest possible total score was present indicated that participants used at least two strategies while navigating the spaces between Brazilian and Canadian cultures.

Figure 16 presents the four strategies organized by ascending medians. When median magnitude was considered, Integration was the highest scoring strategy for this sample as it had the highest median (median = 3.37). Assimilation and Separation tied in second place sharing the same median = 2.71. Having obtained the highest score in the overall sample, however, does not imply predominance. Predominance is understood as the strategy most frequently chosen by most participants. Given that participants used more than one acculturation strategy, it would be artificial to attempt to establish which single acculturation strategy was predominant. It would be more meaningful to determine which pattern of acculturation strategies, if any, appeared more frequently in the sample. I describe such investigation in the next subsection.
The premise that a person may utilize various acculturation strategies at different times and according to life domain or environmental circumstances was confirmed by the data presented in Table 2, whereby participants had scores higher than the lowest score possible for the scale on at least two acculturation strategies. However, it was unclear what kinds of combinations of strategies participants utilized. I utilized cluster analyses to identify whether there were any patterns of such combinations. I investigated two cluster solutions through exploratory and confirmatory analyses. Additional crosstabulation analyses were used to establish the cluster solution that best fit the data.

**Exploratory cluster analysis.** This analysis followed two stages using the four standardized acculturation strategies as input variables. Initially, an exploratory two-step cluster analysis demonstrated that the data could be classified into three clusters, each resulting from a combination of the four acculturation strategies. The quality of the cluster classification was fair. The silhouette measure of cohesion and separation was .3. Subsequent $k$-means cluster analysis explored the
properties of these tree clusters. Convergence was achieved after 11 iterations with a minimum distance between initial cluster centers of 5.670. The ANOVA table in the $k$-means cluster solution indicated that all four acculturation strategies contributed significantly to the cluster solution. Table 3 displays the unique combination of strategies that composed each profile.

Table 3

*Final Cluster Centres for Exploratory 3-Cluster Solution*

<table>
<thead>
<tr>
<th>Acculturation Strategy</th>
<th>Assimilated ($n = 60$)</th>
<th>Integrated ($n = 76$)</th>
<th>Marginalized ($n = 44$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td>-.73</td>
<td>.72</td>
<td>-.25</td>
</tr>
<tr>
<td>Assimilation</td>
<td>.74</td>
<td>-.48</td>
<td>-.17</td>
</tr>
<tr>
<td>Separation</td>
<td>-.91</td>
<td>.29</td>
<td>.74</td>
</tr>
<tr>
<td>Marginalization</td>
<td>-.40</td>
<td>-.42</td>
<td>1.27</td>
</tr>
</tbody>
</table>

The Integrated profile was the largest group ($n = 76$, 42.2%) followed by the Assimilated profile ($n = 60$, 33.3%). The Marginalized group had the lowest membership ($n = 44$, 24.4%) and counted with high scores of separation in addition to marginalization. This makes the interpretation of this cluster less obvious and perhaps could be better conceptualized as a mix of strategies that deprioritize the dominant culture. A visual representation of these results is provided in Figure 17.
Confirmatory cluster analysis. This analysis utilized parameters used in previous studies based on a predetermined four-cluster solution including the four acculturation strategies and several observed acculturation behaviours (Berry et al., 2006; M. J. Miller et al., 2012). For this study, there were 10 observed behaviour variables related to cultural identification, language use and proficiency, nationality of social network, and opinions regarding culture compatibility. Given the number of missing data for these variables, however, they could not enter cluster analyses and were instead used at a later stage to validate the cluster solution. This approach also followed Aldenderfer and Blashfield’s (1984) recommendation to validate clusters against variables not used to produce the clusters. Therefore, I conducted a k-means cluster analysis with a four-cluster solution having the standardized version of the four acculturation strategies as input variables. Convergence was achieved after 13 iterations with a minimum distance between initial cluster centers of 5.070. The resulting ANOVA table indicated that all four acculturation strategies
contributed significantly to the cluster solution. Each of the four resulting profiles\textsuperscript{25} presented one of the acculturation strategies as predominant. Table 4 displays the unique combination of strategies that composed each profile.

Table 4

<table>
<thead>
<tr>
<th>Acculturation Strategy</th>
<th>Marginalized (n = 38)</th>
<th>Integrated (n = 61)</th>
<th>Separated (n = 28)</th>
<th>Assimilated (n = 53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td>.03</td>
<td>.95</td>
<td>-.71</td>
<td>-.74</td>
</tr>
<tr>
<td>Assimilation</td>
<td>.43</td>
<td>-.47</td>
<td>-.89</td>
<td>.70</td>
</tr>
<tr>
<td>Separation</td>
<td>.17</td>
<td>.31</td>
<td>.86</td>
<td>-.94</td>
</tr>
<tr>
<td>Marginalization</td>
<td>1.40</td>
<td>-.41</td>
<td>.19</td>
<td>-.63</td>
</tr>
</tbody>
</table>

Profiles with an inclination to participate in the dominant society had the largest membership with the Integrated profile being the largest group (n = 61, 33.9%) followed by the Assimilated profile (n = 53, 29.4%). Just over one third of participants were classified into one of the two profiles that tend to deprioritize the dominant culture (Marginalized and Separated). Of these, Separation profile was the smallest group (n = 28, 15.6%). A visual representation of these results is provided in Figure 18.

\textsuperscript{24} Only continuous variables had missing data replaced with multiple imputations.

\textsuperscript{25} Terminology used by Berry and colleagues (2006).
Cluster analyses comparison. The four- and three-cluster solutions underwent a preliminary validation through crosstabulation analyses utilizing the 10 observed acculturation behaviours previously mentioned. Analyses also investigated differences in terms of demographic characteristics. There were no demographic characteristics significantly associated with either cluster solution. In terms of cultural identification variables, language knowledge and usage were significantly correlated with both cluster solutions. Nationality of social support network was associated only with the three-cluster solution. Of the Attitude Toward Life in Canada variables, only feeling welcome in Canada was significantly correlated with the four-cluster solution. Table 5 contains a summary of the results for both cluster solutions.
Table 5
*Cramer’s V Correlations Between Cluster Solutions and Demographic and Culture-Related Variables

<table>
<thead>
<tr>
<th>Variablesa</th>
<th>Cluster Solutions</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exploratory (3 Clusters)</td>
<td>Confirmatory (4 Clusters)</td>
<td></td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.006b</td>
<td>.083</td>
<td></td>
</tr>
<tr>
<td>Time in Canada</td>
<td>.118</td>
<td>.157</td>
<td></td>
</tr>
<tr>
<td>Immigration Status</td>
<td>.130</td>
<td>.157</td>
<td></td>
</tr>
<tr>
<td>Education (n = 179)</td>
<td>.158</td>
<td>.144</td>
<td></td>
</tr>
<tr>
<td>Income – individual (n = 154)</td>
<td>.207</td>
<td>.153</td>
<td></td>
</tr>
<tr>
<td>Income – household (n = 165)</td>
<td>.200</td>
<td>.173</td>
<td></td>
</tr>
<tr>
<td>Cultural Identification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural identification</td>
<td>.150</td>
<td>.160</td>
<td></td>
</tr>
<tr>
<td>Nationality of romantic partners (n = 177)</td>
<td>.231</td>
<td>.211</td>
<td></td>
</tr>
<tr>
<td>Nationality of support network (n = 166)</td>
<td>.282**</td>
<td>.214</td>
<td></td>
</tr>
<tr>
<td>Language knowledge – Portuguese</td>
<td>.072</td>
<td>.133</td>
<td></td>
</tr>
<tr>
<td>Language knowledge – English</td>
<td>.308**</td>
<td>.215**</td>
<td></td>
</tr>
<tr>
<td>Language usage at home</td>
<td>.268**</td>
<td>.196*</td>
<td></td>
</tr>
<tr>
<td>Language usage outside the home</td>
<td>.286**</td>
<td>.192*</td>
<td></td>
</tr>
<tr>
<td>Attitude Toward Life in Canada</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture alikeness (n = 178)</td>
<td>.188</td>
<td>.185</td>
<td></td>
</tr>
<tr>
<td>Culture Compatibility (n = 177)</td>
<td>.127</td>
<td>.097</td>
<td></td>
</tr>
<tr>
<td>Welcome in Canada</td>
<td>.206</td>
<td>.253**</td>
<td></td>
</tr>
</tbody>
</table>

*Note. *n = 180, unless otherwise specified. *b Eta Squared.  
* *p < .05, two-tailed. ** p < .01, two-tailed.
Given the above results, it seemed that both cluster solutions were valid representations of the sample’s acculturation profiles. With regard to interpretability, the four-cluster solution had a more clear distinction of acculturation strategy predominance within each cluster and it more closely reflected the findings of previous studies (e.g., Berry et al., 2006; M. J. Miller et al., 2012), which facilitates comparison of results at a later stage. Given these reasons, I chose the four-cluster solution to integrate subsequent analyses. Detailed validation of the four-cluster solution is provided next through the description of each cluster.

**Description and validation of the four acculturation profiles.** A closer look at the demographic and immigration context variables of the four profiles revealed similarities as well as differences. The four clusters had no significant differences in terms of demographic characteristics, such as gender, age, time in Canada, immigration status, education, and income, which followed the trends of the total sample. In addition, no significant differences were found in terms of Portuguese proficiency, self-reported cultural identification, nationality of romantic partners or support network, or perceptions regarding similarities and compatibility between Brazilian and Canadian cultures. Below is a brief description of each acculturation profile with regard to the characteristics that are unique to each of them. The top answer choices in the total sample for each demographic characteristic and immigration context variables were identified, and four tables were created containing the values of these variables per cluster. These tables are available in Appendix H and their content provided the foundation for the description of each cluster that is presented next.

**Marginalized profile.** This group was second in the number of university-educated members \( (n = 28, 75.7\%, \text{ undergraduate and graduate combined}) \). Most of its members were situated in the

---

26 The percentages in this section refer to each cluster \( n \).
lowest individual income bracket (< $20,000, n = 9, 32.1%). Members of this profile reported that leaving Brazil was not their choice (n = 11, 29.7%) more often than their counterparts of other profiles. They left Brazil mainly due to QOL issues (n = 22, 59.5%) and chose Canada mostly for perceiving that they could have a better QOL here (n = 9, 25.7%). Prior to immigrating, nearly half of them intended to become a Canadian citizen (n = 15, 41.7%). This group had the highest percentage of individuals who had been in Canada for three years or more (n = 26, 68.4%) and the highest self-identification as Canadian (n = 15, 39.5%).

Over half of the members of the Marginalized profile felt that Brazilian and Canadian cultures were not compatible (n = 20, 54.1%), while nearly all of them felt at least somewhat welcome in Canada (n = 36, 94.7%). This group ranked second in having no intention at all to return to Brazil (n = 11, 28.9%). Most of their romantic partners were Brazilian (n = 27, 73.0%) and they were the second highest in the number of Brazilians in their social network (n = 23, 79.3%). The Marginalized profile had the highest percentage of individuals who did not have a social support network (n = 11, 29.7%). Of these, 82% (n = 9) and who felt that Brazilian and Canadian cultures were not compatible (Phi = .351, p = .035). Most individuals were fluent in English (n = 17, 44.7%); however, this group had the highest percentage of individuals with a beginner English proficiency (n = 3, 7.9%). They had one of the highest percentage of individuals who spoke both Portuguese and English at home (n = 8, 21.1%) and were second in the percentage of people who spoke English outside the home (n = 24, 63.2%).

*Integrated profile.* This group had the second lowest percentage of university-educated members (n = 43, 70.5%, undergraduate and graduate combined). Nearly half of its members had individual income situated in the lowest income bracket (< $20,000, n = 22, 42.3%). The majority
of individuals from the Integrated profile left Brazil due to QOL issues \((n = 38, 62.3\%)\) and their group reported the lowest frequency of perceiving that leaving Brazil was not their choice \((n = 7, 11.5\%)\). Most of them chose Canada for perceiving that they could have a better QOL here \((n = 19, 31.1\%)\). Prior to immigrating, becoming a Canadian citizen was the most frequently reported intention \((n = 24, 39.3\%)\). Interestingly, the Integrated profile had the highest percentage of undocumented immigrants \((n = 9, 14.8\%)\) across all profiles. This group had the highest percentage of individuals who had been in Canada up to two years \((n = 25, 41\%)\) and two thirds of its members self-identified as Brazilians \((n = 41, 67.2\%)\).

The majority of the members of the Integrated profile felt that Brazilian and Canadian cultures were not alike\(^2\) \((n = 51, 83.6\%)\), while half of them felt that the two cultures were compatible \((n = 33, 55\%)\), and nearly all of them felt welcome in Canada \((n = 55, 90.2\%)\). This group ranked second in having definite plans to return to Brazil \((n = 14, 23.3\%)\). Most of their romantic partners were Brazilian \((n = 38, 63.3\%)\) and they had the highest percentage of Brazilians in their social network \((n = 47, 79.7\%)\). Nearly half of the sample was fluent in English \((n = 29, 47.5\%)\). They had the highest percentage of individuals who spoke Portuguese at home \((n = 47, 77\%)\) and the highest percentage of people who spoke both Portuguese and English outside the home \((n = 26, 42.6\%)\).

**Separated profile.** Members of this group had the highest percentage of graduate education \((n = 8, 28.6\%)\). Nearly half of its members had individual income situated in the lowest income bracket \(< $20,000, n = 11, 42.3\%)\). Members of this profile reported less often than members of other profiles, that QOL issues motivated them to leave Brazil \((n = 11, 39.3\%)\). On the other hand,

\(^{27}\) The variable culture compatibility was dichotomized into ‘not compatible’ (answer options ‘not at all’ and ‘a little bit’) and ‘compatible’ (answer options from ‘somewhat’ to ‘very much’).
this group endorsed QOL as a reason to choose Canada more frequently than the other groups ($n = 11, 39.3\%$). Prior to immigrating, half of this group intended to stay in Canada for a limited time ($n = 24, 39.3\%$). This group had the lowest percentage of individuals who had been in Canada eight years or more ($n = 6, 21.4\%$) and the highest percentage of members self-identified as Brazilians ($n = 25, 89.3\%$). This was the only group in which bicultural identification was not reported. Over half of the members of the Separated profile felt that Brazilian and Canadian cultures were not at all alike ($n = 16, 57.1\%$), being the profile with the highest percentage of this response. It also had the highest percentage of individuals who found that the two cultures were not at all compatible ($n = 6, 21.4\%$).

The Separated profile was the only group in which the response option ‘very much’ was not reported for both culture compatibility and feeling welcome in Canada questions. Just over half of them felt that Brazilian and Canadian cultures were not compatible ($n = 15, 53.6\%$). They had by far the lowest percentage of members who felt welcome in Canada ($n = 19, 67.9\%$) and had the highest percentage of members who had definite plans to return to Brazil ($n = 9, 32.1\%$). Most of their romantic partners were Brazilian ($n = 20, 71.4\%$) and this was the only group to report that they did not have Canadian partners or Canadian individuals in their social support network. The Separated profile had the second highest percentage of individuals who did not have a social support network ($n = 8, 28.6\%$). Most individuals were fluent in English ($n = 17, 60.7\%$). They had the second highest percentage of individuals who spoke Portuguese at home ($n = 21, 75.0\%$) and over half of them spoke mainly English outside the home ($n = 15, 53.6\%$).

**Assimilated profile.** This group had the highest percentage of university-educated members ($n = 46, 86.8\%, \text{ undergraduate and graduate combined}$) and the lowest concentration of members

---

28 The variable culture alikeness was dichotomized into ‘not alike’ (answer options ‘not at all’ and ‘a little bit’) and
with individual income situated in the lowest income bracket ($<20,000, n = 15, 31.3$%). More than half left Brazil due to QOL issues ($n = 31, 58.5$%) and they reported more often than the other profiles that they chose Canada because they liked its people and culture ($n = 14, 26.4$%). Prior to immigrating, half of this group intended to become a Canadian citizen ($n = 26, 49.1$%) and this group had the lowest percentage of individuals who intended to stay in Canada for a limited time ($n = 7, 13.2$%). This group had the second highest percentage of individuals who had been in Canada eight years or more ($n = 17, 32.1$%) and who self-identified as Canadian ($n = 19, 35.8$%)

Over two thirds of the members of the Assimilated profile felt that Brazilian and Canadian cultures were not alike ($n = 40, 76.9$%), yet, this profile had the highest percentage of individuals who found that the two cultures were compatible ($n = 32, 61.5$%). They presented the highest endorsement of feeling welcome in Canada with almost the entire group feeling welcome ($n = 52, 98.1$%). This group ranked first in having no plans at all to return to Brazil ($n = 21, 39.6$%). While half of them had a Brazilian partner ($n = 26, 50$%), this group endorsed the highest percentage of having Canadian as partners ($n = 10, 19.2$%) and as part of their support network ($n = 10, 19.6$%). The Assimilated profile had the highest percentage of individuals who could count on a social support network ($n = 48, 94.1$%). They also ranked highest in English fluency ($n = 39, 73.6$%) and in its use as the predominant language at home ($n = 14, 26.4$%) and outside the home ($n = 43, 81.1$%). Appendix H contains details of the characterization of the four profiles.

Among the four acculturation profiles, Separated and Assimilated had more distinct features coherent with favouring Brazilian or Canadian culture, respectively. The Integration profile, as expected, had aspects of both cultural orientations and, at times showed a tendency to favour aspects of the Brazilian culture, such as lower English proficiency and predominance of Portuguese
as the language used at home. The Marginalized profile had a less homogenous presentation. For example, although its predominant acculturation strategy presupposes some degree of dissociation from both Brazilian and Canadian cultures, members of this group had a strong inclination to participate in Canadian society by virtue of becoming citizens, self-identifying as Canadians, and speaking mostly English outside the home. On a personal level, these individuals continued to have mainly Brazilians as romantic partners and as part of their support network. Further reflections on acculturation profiles are presented in the Discussion chapter. The next section outlines the results with regard to the other major variables of this study.

**Quality of Life**

The Quality of Life Profile (QOLP) measured participants’ appraisals of the importance and satisfaction related to various areas of life. Reliability analysis of all QOLP subscales revealed good to excellent reliability. Cronbach’s alpha for the nine areas of life subscales ranged from .79 to .87. The reliability of the three domains and the full scale QOLP were excellent (α > .90). Table 6 contains the Cronbach’s alpha for all QOLP subscales.

**Table 6**

*Reliability of the Quality of Life Profile Subscales*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas of Life</td>
<td>Domain</td>
</tr>
<tr>
<td>Physical</td>
<td>0.84</td>
</tr>
<tr>
<td>Psychological</td>
<td>0.87</td>
</tr>
<tr>
<td>Spiritual</td>
<td>0.87</td>
</tr>
<tr>
<td>Social</td>
<td>0.82</td>
</tr>
<tr>
<td>Community</td>
<td>0.79</td>
</tr>
<tr>
<td>Practical</td>
<td>0.81</td>
</tr>
<tr>
<td>Leisure</td>
<td>0.87</td>
</tr>
<tr>
<td>Growth</td>
<td>0.85</td>
</tr>
</tbody>
</table>
Quality of Life Profile (QOLP).

The QOLP scores were normally distributed for this sample. Values ranged from -5.59 to 8.89, with a mean score of $M = 2.31$ ($SD = 2.54$). Figure 19 provides a visual representation of the QOLP scores for this sample.

![Figure 19. Distribution of Quality of Life Profile scores.](image)

According to the authors of the QOLP scale, an individual’s overall QOL score may be classified from ‘very problematic’ to ‘excellent.’ For the present study, nearly two thirds of participants scored in the ‘very acceptable’ to ‘excellent’ range ($n = 117$, 65%), while only 6.7% ($n = 12$) had from problematic to very problematic QOL (see Table 7).
Table 7
*Categorization of the Quality of Life Profile Scores*

<table>
<thead>
<tr>
<th>QOL Classification</th>
<th>Score Range^a</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Problematic</td>
<td>= -4.5</td>
<td>.6</td>
</tr>
<tr>
<td>Problematic</td>
<td>-4.49 to -1.49</td>
<td>6.1</td>
</tr>
<tr>
<td>Adequate</td>
<td>-1.5 to +1.49</td>
<td>28.3</td>
</tr>
<tr>
<td>Very Acceptable</td>
<td>+1.5 to +4.49</td>
<td>47.8</td>
</tr>
<tr>
<td>Excellent</td>
<td>= +4.5</td>
<td>17.2</td>
</tr>
</tbody>
</table>

*Note: ^a Score ranges were adapted from Quality of Life Profile: Adult Version, by I. Brown, D. Raphael, and R. Renwick, 2002, Toronto: Centre for Health Promotion, University of Toronto.*

The QOLP also contained two adjunct scales measuring participants’ perceptions of control over the ability to improve their quality of life and perceptions of opportunities available in society to improve their nine areas of life.

**QOLP Control subscale.**

The QOLP Control scale had excellent reliability with Cronbach’s $\alpha = .903$. The scale was negatively skewed, with scores ranging from 1 to 5 and a median score of 3.83, slightly higher than the scale’s half-way point score of 3. These results suggest that this sample tended to perceive that they had a fair amount of control over their quality of life. Figure 20 displays the distribution of Control scores for this sample.
Figure 20. Distribution of QOLP Control scores.

**QOLP Opportunity subscale.**

The reliability of the QOLP Opportunity scale was excellent ($\alpha = .935$). The scale was normally distributed, with scores ranging from 1.78 to 5 ($M = 3.54$, $SD = .76$). Figure 21 displays the distribution of Opportunity scores for this sample.
Correlation analysis revealed that the overall level of QOL was strongly related to participants’ perceptions of their control to change their circumstances \((r = .680, \alpha = .000)\) and moderately related to the availability of opportunities to make improvements \((r = .424, \alpha = .000)\). These results suggested that the more control and availability of opportunities, the higher was participants’ overall quality of life.

Additional linear regression with hierarchical entry of predictors, revealed that Control scores were good predictors of QOL \((\beta = .680, p = .000)\), accounting for approximately 46% of variability in QOL scores. Opportunity scores were not a significant predictor of overall quality of life \((\beta = .100, p = .119)\).

**Negative Affect**

Mental health was conceptualized as low endorsement of negative affect, which was measured through three scales: CES-D, DASS-21-Anx, and DASS-21-Stress. This section will
present the results based on these three instruments and the resulting negative affect (NA) composite score.

**Negative affect indicators.**

**Depression.** The Center for Epidemiologic Studies Depression Scale (CES-D) collected information related to Depression symptoms. Reliability analysis revealed that the CES-D had an excellent reliability with Cronbach’s α = .92. All 20 items contributed to the overall scale. The CES-D scores were not normally distributed and ranged from 0 to 53, with a median score of 11. This indicated that the endorsement of depression symptoms (i.e., depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance) was lower than the proposed cut-off of 16 for more than half of the participants. Just over one third \( (n = 62, 34.4\%) \) of respondents reported a significant level of depressive symptomatology (scores equal or greater than the cut-off of 16; see Figure 22).

![Figure 22. Participants' endorsement of depressive symptomatology according to CES-D's proposed cut-off of 16.](image)

**Anxiety.** Reliability analysis of the Anxiety scale (DASS-A) of the Depression Anxiety and Stress Scale – 21 (DASS-21) revealed that it had excellent reliability (α = .90). All seven items
contributed to the overall scale. The scores of the DASS-21-Anxiety were not normally distributed and ranged from 0 to 42, with a median score of 2, suggesting that participants experienced few symptoms of autonomic arousal, situational anxiety, and anxious affect. A proposed classification of the DASS-Anxiety divides scores into normal, mild, moderate, severe, and extremely severe (Australian Centre for Posttraumatic Mental Health, n.d.). For this sample, 24% of participants reported from mild to extremely severe anxiety (see Figure 23).

![Bar chart showing anxiety severity ratings](image)

Figure 23. Participants' endorsement of anxiety symptoms according to DASS-21's proposed severity classification.

**Stress.** Reliability analysis revealed excellent reliability for the DASS-21-Stress scale ($\alpha = .90$). All seven items contributed to the overall scale. The scores of the DASS-21-Stress were not normally distributed and ranged from 0 to 42, with a median score of 6, indicating that participants experienced low levels of nervous tension, agitation, and impatience. Based on proposed severity categories for the DASS-Stress (see Australian Centre for Posttraumatic Mental Health, n.d.), 22.8% of participants reported to experience from mild to extremely severe stress (see Figure 24).
Based on the above results, a larger number of individuals experienced more depressive symptoms, followed by anxiety, and stress. The relationship among these three scales is presented next.

**Negative affect composite score.**

Correlation analysis determined that depression was strongly correlated with anxiety \((r = .673, \alpha = .000)\) and stress \((r = .699, \alpha = .000)\), and that there was a very strong correlation between anxiety and stress scores \((r = .834, \alpha = .000)\). The presence of a significant relationship among these three variables raised the interest of combining them into a single index of negative affect.

A sequence of procedures verified whether the variables demonstrating current mental health difficulties could be reduced into fewer composites. First, the scores from the three scales were standardized to place them on the same scale. Next, a principal component analysis with Varimax rotation and Kaiser normalization extracted one component, composed by all three variables. Lastly, reliability analysis revealed a very good internal consistency \((\alpha = .89)\) providing further confirmation that the scores of the three scales could be combined. As a result of these
procedures, a Negative Affect (NA) composite score was created by adding the standardized scores of the depression, anxiety, and stress scales.

The distributional properties of the Negative Affect composite were investigated to evaluate whether the variable was normally distributed and to describe its central tendency and amount of variability. The distribution was positively skewed (see Figure 25), with scores ranging from -2.85 to 10.97. The median score was -0.8817. Standardized scales have a mean of zero; therefore, negative values are below the mean. Since the median score is negative, this suggests that more than half of the sample had lower than average levels of negative affect.

![Figure 25. Distribution of Negative Affect scores.](image)

Negative Affect (NA) was the dependent variable in this study, which was to be used in regression analyses. Given that variables must be normally distributed to enter regression, I computed a series of transformations to normalize NA. For further details on these procedures, see the subsection ‘Analysis of regression assumptions and related data transformations’ of the Research Method chapter. After a successful log transformation, the distribution of Negative Affect
was normalized with scores ranging from .06 to 1.18 and a mean of $M = .52$ ($SD = .26$). Figure 26 provides a visualization of the log-transformed distribution of Negative Affect.

Figure 26. Distribution of Negative Affect scores after log transformation.

Optimism

The Life Orientation Test – Revised (LOT-R) obtained acceptable internal consistency ($\alpha = .735$) based on its 10 items. The scale’s internal consistency was minimally affected when the four ‘filler’ items (2, 5, 6, and 8) were removed ($\alpha = .729$). High scores represent a high predisposition to optimism (i.e., evaluate life’s circumstances favourably). The LOT-R scores were negatively skewed, with scores ranging from 2 to 24 and a median score of 16 (see Figure 27). These results suggest that this sample had a tendency to have an optimistic approach to life. This is an important finding since the LOT-R was included in this study as a way to control for personality predispositions when evaluating negative affect.
Figure 27. Distribution of LOT-R Optimism scores.

**Exploratory Correlation Analyses**

Various relationships among variables were investigated, for example, between demographic and immigration context variables and the main constructs of this study. The relationships among the dependent, mediator/moderator, and control variables were also explored in order to establish which variables should enter the mediation and moderation analyses as potential controls. For this purpose, this study selected only those variables that had a moderate to high relationship with the dependent variable: negative affect.

**Relationships with demographic variables.**

Eta-squared coefficients investigated the relationships between categorical demographic data and participants’ scores on the scales that reflected the main constructs of this study (i.e., acculturation strategies and profiles, quality of life, optimism, and negative affect). Most relationships were weak, except for individual income, which had a moderate relationship with overall quality of life ($\eta^2 = .17$) and QOL control ($\eta^2 = .16$). This positive relationship indicated
that the higher the individual income, the more quality of life and control over quality of life participants perceived themselves to have.

Participants’ age was the only continuous demographic variable. Eta square between age and acculturation profiles (the only categorical dependent variable) was negligible ($\eta^2 = .01$). Pearson’s correlations between age and all continuous dependent variables were not significant.

**Relationships with immigration context variables.**

Eta-squared calculations determined the correlations between immigration context (ICQ) categorical variables and participants’ scores on the scales that reflect the main constructs of this study (i.e., acculturation strategies and profiles, negative affect, quality of life, and optimism). There were no correlations between ICQ categorical variables and continuous predictors or dependent variables. I also calculated eta-squared between ICQ continuous variables and Acculturation Profiles. A single moderate relationship was found between acculturation profiles and Satisfaction with Life in Canada (SLCI) ($\eta^2 = .13$). The relationship between acculturation profiles and the other continuous ICQ variables was negligible (see Table 8).

Crosstabulations between categorical ICQ variables and categorical predictor variables revealed that acculturation profiles were weakly, but significantly correlated with English proficiency (Cramér’s $V = .22$, $p \leq .01$), language spoken at home (Cramér’s $V = .20$, $p \leq .05$), outside the home (Cramér’s $V = .19$, $p \leq .05$), and presence of a social support network (Cramér’s $V = .27$, $p \leq .01$). For example, over two thirds of participants ($n = 5$, 71.5%) who reported a beginner English proficiency belonged to one of the two acculturation profiles that deprioritize Canadian culture, namely Marginalized ($n = 3$, 42.9%) and Separated ($n = 2$, 28.6%). Similarly, those who were fluent in English belonged more frequently to the Assimilated ($n = 39$, 38.2%) or Integrated groups ($n = 29$, 28.4%), profiles that have an interest in being connected to the Canadian culture.
Portuguese and English were most often spoken at home by those belonging to the Integrated profile \( (n = 10, 30.3\%) \) while English was most often spoken at home by those belonging to the Assimilated profile \( (n = 14, 70\%) \). Outside the home, individuals from the Integrated profile accounted for almost half of the individuals who spoke Portuguese and English \( (n = 26, 48.1\%) \), while English was most often spoken by members of the Assimilated profile \( (n = 43, 38.4\%) \). Over one third of participants who did not have a social support network belonged to the Marginalized group \( (n = 11, 37.9\%) \).

Listwise Pearson’s correlations explored significant relationships between continuous immigration context variables and predictor and dependent variables. Various weak correlations were present between ICQ continuous variables the predictor variables (see Table 9). There were no strong correlations; however, the Satisfaction with Life in Canada Index (SLCI) was moderately correlated with a few predictors. In particular, SLCI was positively correlated with Assimilation \( (r = .41, \alpha < .01) \), QOL \( (r = .49, \alpha < .01) \) and QOLP Control \( (r = .52, \alpha < .01) \), but negatively correlated with Separation \( (r = -.383, \alpha < .01) \). These results suggested that the more participants were satisfied with their life in Canada the more assimilated they were, the higher sense of control over their quality of life they experienced, and the higher overall quality of life they enjoyed. Conversely, the more satisfied with their lives in Canada they were, the less separated from Canadian culture they were. Mental health history (MHH) was the only ICQ variable moderately correlated with negative affect, the main dependent variable \( (r = .45, \alpha < .01) \), indicating that the more participants reported a history of mental health difficulties, the higher was their current negative affect. It is noteworthy that although the SLCI was not correlated with anxiety scores \( (r = -.13, \alpha = .072) \) and had only a weak relationship with stress \( (r = -.17, \alpha < .05) \) and NA \( (r = -.29, \alpha < .01) \), it had a moderate negative correlation with depression scores \( (r = -.42, \alpha < .01) \).
**Relationships between predictors and dependent variables.**

Eta square calculations explored relationships between continuous variables and acculturation profiles, the categorical predictor. This analysis revealed weak relationships between acculturation profiles and all other predictors and dependent variables, except for SLCI, with which it had a moderate relationship ($\eta^2 = .13$) as previously noted. *Table 8* displays the resulting eta-squared values.

*Table 8*

**Relationship Between Acculturation Profiles and Continuous Variables**

<table>
<thead>
<tr>
<th>Continuous Variables</th>
<th>Eta-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Affect</td>
<td>0.01</td>
</tr>
<tr>
<td>QOL Total</td>
<td>0.04</td>
</tr>
<tr>
<td>QOL Control</td>
<td>0.03</td>
</tr>
<tr>
<td>QOL Opportunity</td>
<td>0.01</td>
</tr>
<tr>
<td>Optimism</td>
<td>0.02</td>
</tr>
<tr>
<td>SLCI</td>
<td>0.13</td>
</tr>
<tr>
<td>CCI</td>
<td>0.04</td>
</tr>
<tr>
<td>MHH</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Listwise Pearson’s correlations explored relationships among all continuous predictors (predictors, mediator/moderator, and controls) and dependent variables. *Table 9* demonstrates the correlations found. Perception of opportunity to improve quality of life was weakly correlated with optimism ($r = .27, \alpha < .01$) and NA ($r = .21, \alpha < .01$), suggesting that such perception was minimally influenced by individuals’ mood or orientation toward life and vice-versa. Most correlations were moderate. The strongest correlation was between overall QOL and QOLP Control ($r = .70, \alpha < .01$), which indicates that the more participants perceived that they had control over
their quality of life, the higher their perceived quality of life. QOL was correlated with only one acculturation strategy. The correlation between QOL and Separation Strategy was weak and negative ($r = -.215, \alpha < .01$), suggesting that participants who enjoyed higher quality of life were less separated from Canadian society, results also found in the relationship between SLCI and Separation scores. Optimism was significantly correlated with NA and all continuous predictors, except for three of the four acculturation strategies (Integration, Assimilation, and Separation). Individuals with high optimism scores tended to experience lower NA and marginalization scores, but high QOL, QOLP Control, and QOLP Opportunity. Negative affect had a moderate negative correlation with Overall QOL ($r = -.625, \alpha < .01$), QOLP Control ($r = -.538, \alpha < .01$), and Optimism ($r = -.409, \alpha < .01$), while it had a moderate positive correlation with Mental Health History ($r = .452, \alpha < .01$). These results suggested that negative affect was lower for those individuals who had an optimistic outlook on life, perceived to have a good QOL, felt that improving their QOL was within their control, and had low endorsement of a mental health history. Again, Table 9 contains all Pearson’s correlations among variables of interest.
Table 9: Correlation Among Potential Predictors, Moderator, Mediator and Dependent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Negative Affect</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Integration</td>
<td>-0.028</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Assimilation</td>
<td>0.084</td>
<td>-0.188*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Separation</td>
<td>0.105</td>
<td>0.166*</td>
<td>-0.378**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Marginalization</td>
<td>0.144</td>
<td>-0.030</td>
<td>0.034</td>
<td>0.315**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Overall QOL</td>
<td>-0.625**</td>
<td>-0.019</td>
<td>0.089</td>
<td>-0.215**</td>
<td>-0.113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6. QOL Control</td>
<td>-0.538**</td>
<td>0.011</td>
<td>0.179*</td>
<td>-0.213**</td>
<td>-0.036</td>
<td>0.704**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. QOL Opportunity</td>
<td>-0.207**</td>
<td>0.096</td>
<td>0.085</td>
<td>-0.123</td>
<td>-0.025</td>
<td>0.417**</td>
<td>0.529**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Optimism</td>
<td>-0.409**</td>
<td>0.032</td>
<td>-0.059</td>
<td>-0.084</td>
<td>-0.155*</td>
<td>0.511**</td>
<td>0.433**</td>
<td>0.274**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. MHHb</td>
<td>0.452**</td>
<td>-0.057</td>
<td>0.140</td>
<td>0.000</td>
<td>0.033</td>
<td>-0.327**</td>
<td>-0.241**</td>
<td>-0.132</td>
<td>-0.235**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. SLCIc</td>
<td>-0.304**</td>
<td>-0.044</td>
<td>0.414**</td>
<td>-0.383**</td>
<td>-0.180*</td>
<td>0.490**</td>
<td>0.516**</td>
<td>0.296**</td>
<td>0.308**</td>
<td>-0.032</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. CCIc</td>
<td>-0.297**</td>
<td>-0.019</td>
<td>0.174*</td>
<td>-0.187*</td>
<td>-0.040</td>
<td>0.271**</td>
<td>0.319**</td>
<td>0.145</td>
<td>0.239**</td>
<td>-0.183*</td>
<td>0.369**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Time Lived in Brazil</td>
<td>-0.095</td>
<td>0.030</td>
<td>-0.099</td>
<td>-0.083</td>
<td>-0.090</td>
<td>0.044</td>
<td>0.089</td>
<td>0.173*</td>
<td>0.060</td>
<td>-0.055</td>
<td>0.099</td>
<td>0.090</td>
<td></td>
</tr>
<tr>
<td>13. Time Living in Canada</td>
<td>0.066</td>
<td>0.039</td>
<td>0.068</td>
<td>-0.092</td>
<td>0.056</td>
<td>-0.051</td>
<td>0.009</td>
<td>0.024</td>
<td>-0.049</td>
<td>0.196**</td>
<td>0.115</td>
<td>-0.016</td>
<td>-0.101</td>
</tr>
</tbody>
</table>

Note: a Listwise n = 173. b Mental Health History. c Satisfaction with Life in Canada Index. d Culture Compatibility Index.

*p < .05, 2-tailed. **p < .01, 2-tailed.
Acculturation strategies and negative affect. According to the above exploratory analyses, acculturation profiles were correlated with NA, which raised concerns regarding whether to proceed with further analyses. The decision to continue with the originally proposed mediation and moderation analyses was made based on three reasons. First, the relationship between acculturation strategies and NA has been repeatedly found in previous studies. A new correlation analysis with results displayed per cluster revealed that there was in fact a significant correlation between NA and continuous acculturation strategies for members of the Marginalized profile. In particular, NA had a moderate positive correlation with Assimilation strategy ($r = .34, \alpha < .05$). There were no significant correlations between NA and acculturation strategies within the other three acculturation profiles. Second, while the existence of a correlation between predictor and outcome is a prerequisite for mediation analyses, it is not a requirement for moderation analyses, where the interaction term may be significant even though one of its original variables was not. Third, the inclusion of control variables in mediation and moderation analyses could change the relationship between acculturation profiles and NA. These reasons warranted the continuation of the analyses investigating the role of QOL on the relationship between acculturation profiles and NA.

All the relationships investigated above provided information necessary to test the models related to the core and supporting research questions of this study. As mentioned previously, only variables that were at least moderately related to Negative Affect (dependent variable) were included in the final analyses, except for acculturation profiles that were included even though their relationship with NA was weak (see Table 10 for a list of these variables). The next section describes the results of the tests that investigated whether QOL mediates and/or moderates the relationship between acculturation profiles and NA utilizing the variables presented below.
Table 10  
Variables Used for Mediation and Moderation Analyses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Independent</th>
<th>Mediator/Moderator</th>
<th>Controls</th>
<th>Dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration</td>
<td>Acculturation Profiles</td>
<td>Overall Quality of Life</td>
<td>QOLP Control MHH Optimism</td>
<td>Negative Affect</td>
</tr>
<tr>
<td>Assimilation</td>
<td>Marginalized</td>
<td>Integrated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separation</td>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginalization</td>
<td>Assimilated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mediation analysis.

This section investigated whether QOL mediated the relationship between acculturation profiles and negative affect. According to Baron and Kenny’s methodology (1986), the first step to test a mediation model is to demonstrate that the independent variable is correlated with or predicts the dependent variable. For this purpose, a hierarchical regression analysis was conducted with control variables in the first step and the group of acculturation profiles in the second step. Below are the results of these analyses.

The role of control variables.

The three control variables successfully predicted Negative Affect and combined explained 42% of the NA scores, $F (3, 169) = 41.034, p = .000$. This suggested that the more participants felt they had control over their QOL ($B = -.142, SE = .024, p = .000$), the more optimistic they were ($B = -.011, SE = .004, p = .012$), the lower their history of mental health problems ($B = .044, SE = .008, p = .000$), and the lower was their NA.
Acculturation profiles as predictors.

Acculturation profiles was a nominal variable with four categories (Marginalized, Integrated, Separated, and Assimilated) and had to be dummy-coded prior to entering mediation analysis. The three resulting dummy variables \((k - 1)\) were Marginalized (coded = 1, other groups = 0), Integrated (coded = 1, other groups = 0), Separated (coded = 1, other groups = 0), with the Assimilated profile as the reference group (coded = 0 on all dummy variables).

**Step 1.** I conducted a hierarchical regression analysis with acculturation profiles as predictors of NA. This analysis was significant. The control variables were entered first and had the same role as in the previously described regressions. Together, they predicted 42% of the NA scores, \(F (3, 169) = 41.034, p = .000\). The addition of acculturation profiles explained an extra 3.5% of the variance in NA scores, \(F\) Change \((3, 166) = 3.541, p = .016\). Only the coefficients of the Marginalized \((B = .129, SE = .044, p = .004)\) and Separated \((B = .095, SE = .047, p = .046)\) profiles were significant, indicating that participants who belonged to the Marginalized and Separated clusters were more likely to experience NA problems than those of the Assimilated profile. It is of note that Optimism lost its predictive role \((B = -.008, SE = .004, p = .067)\) once acculturation profiles entered the equation, suggesting that acculturation profiles overruled Optimism’s influence on NA (see Table 11 for details).
Step 2. The second step of the mediation analysis was to verify whether acculturation profiles predicted QOL, the mediator variable, while controlling for variables moderately correlated with QOL, namely, QOLP Control, QOLP Opportunity, Optimism, and SLCI. QOLP Opportunity failed to predict QOL \((B = .238, SE = .202, p = .240)\). The other three control variables successfully predicted QOL and combined explained 54% of QOL scores, \(F(4, 175) = 51.019, p = .000\). This suggested that the more participants felt they had control over their QOL \((B = 1.618, SE = .242, p = .000)\), the more optimistic they were, \((B = .144, SE = .036, p = .000)\), and the more satisfied with their life in Canada they were \((B = .151, SE = .055, p = .007)\), the higher was their QOL. The addition of the acculturation profiles did not add to the model, \(F\) Change \((3, 172) = .864, p = .461\), indicating that acculturation profiles were not good predictors of QOL (see Table 12). These results indicated that step 2 of mediation analysis was not satisfied; therefore, mediation analysis was discontinued.
Table 12
Step 2 of Mediation Analysis With Acculturation Profiles as Predictors of Quality of Life

<table>
<thead>
<tr>
<th>Regression Step</th>
<th>$R^2$</th>
<th>SE</th>
<th>$\Delta R^2$</th>
<th>$F_\Delta$</th>
<th>df</th>
<th>$B$</th>
<th>SE of $B$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Control Variables</td>
<td>.538</td>
<td>1.74395</td>
<td>.538</td>
<td>51.019</td>
<td>4, 175</td>
<td>1.618</td>
<td>.242</td>
<td>6.693</td>
<td>.000</td>
</tr>
<tr>
<td>QOL Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.618</td>
<td>.242</td>
<td>6.693</td>
<td>.000</td>
</tr>
<tr>
<td>QOL Opportunity</td>
<td>.238</td>
<td>.202</td>
<td>1.179</td>
<td></td>
<td></td>
<td>.238</td>
<td>.202</td>
<td>1.179</td>
<td>.240</td>
</tr>
<tr>
<td>Optimism</td>
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<td>.036</td>
<td>4.010</td>
<td></td>
<td></td>
<td>.144</td>
<td>.036</td>
<td>4.010</td>
<td>.000</td>
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<tr>
<td>SLCI</td>
<td>.151</td>
<td>.055</td>
<td>2.724</td>
<td></td>
<td></td>
<td>.151</td>
<td>.055</td>
<td>2.724</td>
<td>.007</td>
</tr>
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<td>2. Control Variables</td>
<td>.545</td>
<td>1.74599</td>
<td>.007</td>
<td>.864</td>
<td>3, 172</td>
<td>1.597</td>
<td>.244</td>
<td>6.538</td>
<td>.000</td>
</tr>
<tr>
<td>QOL Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.597</td>
<td>.244</td>
<td>6.538</td>
<td>.000</td>
</tr>
<tr>
<td>QOL Opportunity</td>
<td>.265</td>
<td>.204</td>
<td>1.302</td>
<td></td>
<td></td>
<td>.265</td>
<td>.204</td>
<td>1.302</td>
<td>.195</td>
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<tr>
<td>Optimism</td>
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<td>.037</td>
<td>3.968</td>
<td></td>
<td></td>
<td>.146</td>
<td>.037</td>
<td>3.968</td>
<td>.000</td>
</tr>
<tr>
<td>SLCI</td>
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<td>.059</td>
<td>2.187</td>
<td></td>
<td></td>
<td>.129</td>
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<td>.030</td>
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<tr>
<td>Predictors</td>
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<td>1.74599</td>
<td>.007</td>
<td>.864</td>
<td>3, 172</td>
<td>1.597</td>
<td>.244</td>
<td>6.538</td>
<td>.000</td>
</tr>
<tr>
<td>Marginalized</td>
<td>-353</td>
<td>.382</td>
<td>-.923</td>
<td></td>
<td></td>
<td>-353</td>
<td>.382</td>
<td>-.923</td>
<td>.357</td>
</tr>
<tr>
<td>Integrated</td>
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<td>.339</td>
<td>-1.585</td>
<td></td>
<td></td>
<td>-537</td>
<td>.339</td>
<td>-1.585</td>
<td>.115</td>
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<td>Separated</td>
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<td>.436</td>
<td>-.966</td>
<td></td>
<td></td>
<td>-421</td>
<td>.436</td>
<td>-.966</td>
<td>.336</td>
</tr>
</tbody>
</table>

Note: a SLCI = Satisfaction with Life in Canada Index. b Dummy-coded acculturation profiles with Assimilated Profile as the reference group.

Overall, the mediating role of QOL in the relationship between acculturation and NA was not supported for any of the acculturation profiles. This occurred because although acculturation profiles predicted NA (Step 1) they failed to predict QOL (Step 2).²⁹

Moderation analysis.

This section examined whether QOL acted as a moderator of the relationship between acculturation profiles and negative affect. Hierarchical regression analyses tested a moderation

²⁹ It is of note that without controls, acculturation profiles did predict QOL, $F(3, 176) = 3.274, p = .022$, with all clusters being significant contributors, satisfying step 2. Step 3 including controls moderately correlated with NA and acculturation profiles and QOL as predictors was also significant, $F(4, 165) = 7.326, p = .000$, with marginalized cluster and QOL being significant contributors, therefore, satisfying step 3. Since acculturation clusters’ contribution was different than zero, step 4 was not satisfied, indicating that a partial mediation was present. These results are illustrative and will not be considered as a positive response to research question #1 because they do not fulfill the rigor proposed for this study, which presupposes the inclusion of control variables. These results, however, help substantiate my reflection on the importance of considering control variables in research studies, upon which I elaborate in the Discussion Chapter.
model with acculturation profiles as predictors and entering variables according to the following three sequential steps: 1. Control variables; 2. Simple effects, and 3. Two-way interactions.

**The role of control variables.**

Since the control variables for moderation analysis were the same as those used in the mediation analysis (i.e., QOL Control, Optimism, and Mental Health History), their role in predicting NA during step 1 of the moderation analysis remained unchanged and it will not be repeated here. As a summary, it suffices to say that together the control variables predicted 42% of the NA scores, $F(3, 169) = 41.034, p = .000$, with QOL control as the strongest predictor ($B = - .142, SE = .024, p = .000$). The next subsection presents the contribution of simple effects and interaction terms and how they impacted on the role of specific control variables.

**Acculturation profiles as predictors.**

The same dummy-coded acculturation profile variables created for the mediation analysis were used here. The simple effects of this regression analysis explained 8.7% of the variance in NA scores, $F$ Change $(4, 165) = 7.326, p = .000$. Of the simple effects, QOL ($B = -.036, SE = .009, p = .000$) and the Marginalized profile ($B = .108, SE = .042, p = .012$) were significant predictors. The addition of these two variables to the model neutralized the effect of Optimism ($B = -.003, SE = .004, p = .520$) in reducing NA. The $F$ test for the interaction term was not significant, $F$ Change $(3, 162) = .841, p = .473, \Delta R^2 = .008$. None of the interaction terms between QOL and each of the dummy variables had a significant contribution to predicting NA (see Table 13 for details).
Table 13
Two-Way Interactions Between Acculturation Profiles and Quality of Life as Predictors of Negative Affect

<table>
<thead>
<tr>
<th>Regression Step</th>
<th>$R^2$</th>
<th>SE</th>
<th>$\Delta R^2$</th>
<th>$F$ (df)</th>
<th>$B$</th>
<th>SE of $B$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Control Variables</td>
<td>.421</td>
<td>.20069</td>
<td>.421</td>
<td>41.034 (3, 169)</td>
<td>-.142</td>
<td>.024</td>
<td>-5.916</td>
<td>.000</td>
</tr>
<tr>
<td>QOL Control</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHH$^a$</td>
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<td>.008</td>
<td>5.243</td>
<td>.000</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Control Variables</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QOL Control</td>
<td>-</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>-</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>MHH</td>
<td>.040</td>
<td>.008</td>
<td>4.919</td>
<td>.000</td>
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<td></td>
</tr>
<tr>
<td>Simple Effects</td>
<td>.509</td>
<td>.18717</td>
<td>.087</td>
<td>7.326 (4, 165)</td>
<td>-.072</td>
<td>.028</td>
<td>-2.538</td>
<td>.012</td>
</tr>
<tr>
<td>QOL$^b$</td>
<td>-</td>
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<tr>
<td>Marginalized$^c$</td>
<td>.108</td>
<td>.042</td>
<td>2.545</td>
<td>.012</td>
<td></td>
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<td></td>
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<tr>
<td>Integrated$^c$</td>
<td>.006</td>
<td>.037</td>
<td>.164</td>
<td>.870</td>
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<td>Separated$^c$</td>
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<td>.045</td>
<td>1.544</td>
<td>.124</td>
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<td>3. Control Variables</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>QOL Control</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>-</td>
<td></td>
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</tr>
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<td>MHH</td>
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<td>.008</td>
<td>5.008</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>QOL</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginalized</td>
<td>.178</td>
<td>.065</td>
<td>2.734</td>
<td>.007</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Integrated</td>
<td>.049</td>
<td>.060</td>
<td>.820</td>
<td>.414</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>.131</td>
<td>.065</td>
<td>2.024</td>
<td>.045</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Interaction Terms</td>
<td>.516</td>
<td>.18744</td>
<td>.008</td>
<td>.841 (3, 162)</td>
<td>-.026</td>
<td>.018</td>
<td>-1.416</td>
<td>.159</td>
</tr>
<tr>
<td>QOL x Margin.</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>QOL x Integrated</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>QOL x Separated</td>
<td>-</td>
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<td></td>
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</tr>
</tbody>
</table>

Note: $^a$MHH = Mental Health History. $^b$Moderator. $^c$Dummy-coded acculturation profiles with Assimilated Profile as the reference group.

These results indicate that QOL did not moderate the relationship between acculturation profiles and NA, after participants’ scores on Control over QOL, Optimism, and Mental Health History were partialed out. It is of note that the addition of the interaction terms to the model
changed the role of two of the simple effects. QOL ($B = -.020$, $SE = .016$, $p = .226$) no longer predicted NA and the Separated profile ($B = .131$, $SE = .065$, $p = .045$) joined the Marginalized profile in successfully predicting NA. In sum, after controlling for QOL Control, Optimism, Mental Health History, and QOL, members of the Marginalized and Separated profiles tended to have higher levels of negative affect than those of the assimilated and integrated profiles.

**Acculturation and well-being**

This section explored whether there was an acculturation profile that was most associated with well-being, as conceptualized by low levels of NA and high levels of QOL and SLCI. This investigation utilized regression analyses and analyses of covariance (ANCOVA). The regression analyses investigated the relationships between each acculturation strategy and NA, QOL, and SLCI, after controlling for variables moderately to strongly correlated with each of the dependent variables. ANCOVA was used to separately investigate NA, QOL, and SLCI marginal mean differences per acculturation profile, while adjusting for covariates.

**Acculturation and negative affect.**

Hierarchical regression analysis investigated whether acculturation profiles predicted NA above and beyond the control variables. The latter included QOL Control, Optimism, Mental Health History, and Overall QOL, which was moderately correlated with NA, but had not been controlled in previous regressions as it would have conflicted with testing its role as mediator/moderator. According to the regression results, the control variables explained 48% of the NA scores, $F (4, 168) = 39.05, p = .000$. In order of strength of contribution, MHH ($B = .037$, $SE = .008$, $p = .000$, $sr^2 = .064$), QOL ($B = -.038$, $SE = .009$, $p = .000$, $sr^2 = .060$), and QOL Control ($B = -.064$, $SE = .029$, $p = .026$, $sr^2 = .015$) successfully predicted NA, while optimism was not a significant predictor of NA scores. A parallel stepwise regression with control variables revealed
that Acculturation profiles explained an additional 2.7% of NA scores over and above the variance accounted for by the control variables, $F$ Change $(3, 165) = 3.01, p = .032$. Only the marginalized profile ($B = .108, SE = .042, p = .012, sr^2 = .019$) predicted NA. These results indicated that members of this profile were more prone to experiencing higher levels of NA when compared to members of the assimilated profile. By consequence, individuals belonging to the integrated, assimilated, and separated profiles did not differ significantly in their NA levels. Table 14 summarizes these results.

Table 14
Hierarchical Regression Analysis With Acculturation Profiles as Predictors of Negative Affect

<table>
<thead>
<tr>
<th>Acculturation</th>
<th>$R^2$</th>
<th>$SE$</th>
<th>$ΔR^2$</th>
<th>$FA$</th>
<th>$df$</th>
<th>$B$</th>
<th>$SE of B$</th>
<th>$t$</th>
<th>$sr^2$</th>
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<td>1. Control Variables</td>
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<td>.482</td>
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<td>.009</td>
<td>-4.425***</td>
<td>.060</td>
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<td>.015</td>
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<td>.008</td>
<td>4.568***</td>
<td>.064</td>
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<td>.009</td>
<td>-4.197***</td>
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<td>.028</td>
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<td>.004</td>
<td>-0.645</td>
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</tr>
<tr>
<td>MHH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.040</td>
<td>.008</td>
<td>4.919***</td>
<td>.072</td>
</tr>
<tr>
<td>Profiles</td>
<td>.509</td>
<td>.187</td>
<td>.027</td>
<td>3.01*</td>
<td>3, 165</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginalized$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.108</td>
<td>.042</td>
<td>2.545*</td>
<td>.019</td>
</tr>
<tr>
<td>Integrated$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.006</td>
<td>.037</td>
<td>.164</td>
<td>.000</td>
</tr>
<tr>
<td>Separated$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.070</td>
<td>.045</td>
<td>1.544</td>
<td>.007</td>
</tr>
</tbody>
</table>

Note. $^a$MHH = Mental Health History. $^b$Dummy-coded acculturation profiles with Assimilated Profile as the reference group.

An ANCOVA provided further information regarding the NA mean differences across acculturation profiles, while adjusting for overall QOL, QOL Control, Optimism, and Mental Health History.
Health History. As expected, the ANCOVA was significant and mirrored the regression results, $F(3, 165) = 3.007, p = .032$; however, it provided additional clarity as to the levels of NA experienced by each acculturation profile. Members of the Assimilated profile experienced the lowest level of NA ($M = .483, SE = .028$), while individuals from the Marginalized profile demonstrated the highest NA ($M = .591, SE = .032$), with Integrated ($M = .489, SE = .024$) and Separated ($M = .553, SE = .036$) profiles falling in between. Significant mean differences were observed between the Marginalized profile and the Integrated ($M_{Dif} = .102, SE = .04, p = .013$) and Assimilated ($M_{Dif} = .108, SE = .042, p = .012$) profiles. Figure 28 displays the estimated marginal means of NA for each of the four acculturation profiles.

![Figure 28](image)

Figure 28. Estimated Marginal Means for Negative Affect per Acculturation Profile.

When considered together, these results indicated that not only the Marginalized profile predicted NA, but it was also associated with the highest NA levels in the sample. Even though Separated profile has the second highest NA level, its NA means do not differ significantly from the NA means of any of the other three profiles.
I analysed the correlations between the Marginalized profile and all other variables of this study as an attempt to tease out something unique to the Marginalized profile that might help explain its tendency to generate increased negative affect. Two variables were significantly correlated with the Marginalized profile, namely social support (\( \text{Phi} = -0.185, p = 0.014 \)) and English proficiency (Cramér’s \( V = 0.216, p = 0.038 \)). Table 15 summarizes English fluency and social support per cluster. English proficiency does not seem to be unique to the Marginalized profile as the Separated profile had similar English command and the Integrated profile even lower command. On the other hand, social support was lowest in the Marginalized profile as well as in the Separated profile. These were the two profiles with the highest NA levels, which suggests that perhaps their propensity to experience higher NA may be associated with not having a social support network easily accessible. This is corroborated by the fact that the Assimilated profile has the highest level of social support and the lowest NA level.

<table>
<thead>
<tr>
<th>Table 15</th>
<th>Crosstabulation of English Proficiency and Social Support by Acculturation Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Cluster(^a)</td>
</tr>
<tr>
<td></td>
<td>Marginalized</td>
</tr>
<tr>
<td>English Proficiency</td>
<td>(( n = 38 ))</td>
</tr>
<tr>
<td>Beginner to Intermediate</td>
<td>21.1%</td>
</tr>
<tr>
<td>Advanced to Fluent</td>
<td>78.9%</td>
</tr>
<tr>
<td>Social Support</td>
<td>(( n = 37 ))</td>
</tr>
<tr>
<td>No</td>
<td><strong>29.7%</strong></td>
</tr>
<tr>
<td>Yes</td>
<td>70.3%</td>
</tr>
</tbody>
</table>

Note. \(^a\) Valid percentage based on cluster’s \( n \) for each variable.

An ANCOVA with NA as the dependent variable, social support as the fixed factor, and QOL, QOL Control, Optimism, and Mental Health History as covariates provided further support to the hypothesis that social support might help explain the differences in NA across acculturation profiles. The ANCOVA was significant, \( F(1, 165) = 4.320, p = 0.039 \). Individuals without a social
support network \((M = .588, SE = .036)\) experienced higher NA than those who had social support \((M = .505, SE = .016)\). Given that the Marginalized profile had the largest frequency of members without a social support network, it would be expected that they would have the highest NA, when compared to members of the other profiles. The opposite is valid for the Assimilated profile, which had the highest frequency of having a social support network and the lowest NA levels.

**Acculturation and quality of life.**

Hierarchical regression analyses investigated whether acculturation profiles predicted QOL above and beyond variables moderately to strongly correlated with QOL. These variables were QOL Control, QOL Opportunity, Optimism, SLCI, and Negative Affect. According to the regression results, the control variables explained 61% of the QOL scores, \(F(5, 174) = 53.908, p = .000\). In order of strength of contribution, Negative Affect \((B = -3.156, SE = .569, p = .000, sr^2 = .069)\), QOL Control \((B = 1.066, SE = .245, p = .000, sr^2 = .043)\), Optimism \((B = .099, SE = .034, p = .004, sr^2 = .019)\), and SLCI \((B = .146, SE = .051, p = .005, sr^2 = .018)\) successfully predicted QOL, while QOL Opportunity \((B = .368, SE = .188, p = .052, sr^2 = .009)\) was not a significant predictor of QOL scores, with a contribution that only approached significance. None of the four acculturation profiles significantly predicted QOL above and beyond the variance explained by the control variables, \(F\) Change \((3, 171) = 1.139, p = .335\) (See Table 16 for details). Therefore, there was no evidence that any acculturation profile could be associated with better quality of life.
### Table 16

_Hierarchical Regression Analysis With Acculturation Profiles as Predictors of Quality of Life_

<table>
<thead>
<tr>
<th>Acculturation</th>
<th>$R^2$</th>
<th>SE</th>
<th>$\Delta R^2$</th>
<th>FA</th>
<th>df</th>
<th>B</th>
<th>SE of B</th>
<th>t</th>
<th>sr$^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QOL Control</td>
<td>.608</td>
<td>1.61</td>
<td>.608</td>
<td>53.91***</td>
<td>5, 174</td>
<td>1.066</td>
<td>.245</td>
<td>4.355***</td>
<td>.043</td>
</tr>
<tr>
<td>QOL Opportunity</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Optimism</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SLCI$^a$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affect</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Control Variables</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>QOL Control</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>QOL Opportunity</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLCI$^a$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Profiles</strong></td>
<td>.615</td>
<td>1.61</td>
<td>.008</td>
<td>1.14</td>
<td>3, 171</td>
<td>-3.156</td>
<td>.569</td>
<td>-5.546***</td>
<td>.069</td>
</tr>
<tr>
<td>Marginalized$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated$^b$</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $^a$SLCI = Satisfaction with Life in Canada Index. $^b$ Dummy-coded acculturation profiles with Assimilated Profile as the reference group.

*p < .05. **p < .01. ***p < .001

An ANCOVA further investigated QOL mean differences across acculturation profiles, while adjusting for QOL Control, QOL Opportunity, Optimism, SLCI, and Negative Affect. The non-significant ANCOVA, $F(3, 171) = 1.139, p = .335$; indicated that there were no significant mean differences in QOL across acculturation profiles after partialing out the covariates. Members of the Integrated profile obtained the lowest QOL ($M=2.00, SE=.21$), while individuals from the Assimilated profile experienced the highest QOL level ($M=2.53, SE=.23$), with Marginalized ($M=2.47, SE=.267$) and Separated ($M=2.35, SE=.32$) profiles falling in between. As indicated, the mean differences between each of the four profiles were not significant, including the differences between the Integrated and Assimilated profiles ($M_{Dif} = -.526, SE = .31, p = .09$) which correspond
to the two extreme QOL means. Figure 29 displays the estimated marginal means of QOL for each of the four acculturation profiles.

![Figure 29. Estimated Marginal Means for Quality of Life per Acculturation Profile.](image)

These results indicated that QOL did not vary significantly as a function of acculturation profiles. Even though the Integrated and Assimilated profiles obtained the lowest and highest QOL means, respectively, the differences between means were not significant and could not be attributed to the unique nature of each cluster.

**Acculturation and satisfaction with life in Canada.**

Regression analyses investigated whether acculturation profiles predicted Satisfaction with Life in Canada Index (SLCI) above and beyond the variance explained for by variables moderately to strongly correlated with SLCI. These variables were overall QOL, QOL Control, and Culture Compatibility Index (CCI). According to the regression results, the control variables explained 32% of the SLCI scores, \( F(3, 175) = 27.793, p = .000 \), with all control variables contributing to the model. QOL Control \( (B = .999, SE = .328, p = .003, sr^2 = .036) \) was the strongest predictor among the control variables, followed by equal contributions of QOL \( (B = .273, SE = .092, p = .003, sr^2 = .036) \) and...
Acculturation profiles successfully predicted SLCI, after adjusting for the set of control variables, explaining 6.5% of NA scores over and above the variance accounted for by the control variables, $F$ Change $(3, 172) = 6.083, p = .001$. Among the acculturation profiles, the Marginalized profile ($B = -.861, SE = .472, p = .070, sr^2 = .012$) was not a good predictor of SLCI. The Integrated and Separated profiles successfully predicted SLCI, with individuals from the Separated ($B = -2.219, SE = .523, p = .000, sr^2 = .064$) and Integrated ($B = -.987, SE = .419, p = .020, sr^2 = .020$) profiles tending to be less satisfied with their lives in Canada than the individuals from the Marginalized and Assimilated groups. Table 17 summarizes these results.

Table 17

Hierarchical Regression Analysis With Acculturation Profiles as Predictors of Satisfaction With Life in Canada Index

<table>
<thead>
<tr>
<th>Acculturation</th>
<th>$R^2$</th>
<th>$SE$</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
<th>$df$</th>
<th>$B$</th>
<th>$SE$ of $B$</th>
<th>$t$</th>
<th>$sr^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Control Variables</td>
<td>.323</td>
<td>.227</td>
<td>.323</td>
<td>27.79***</td>
<td>3, 175</td>
<td>.273</td>
<td>.092</td>
<td>2.976**</td>
<td>.034</td>
</tr>
<tr>
<td>QOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.999</td>
<td>.328</td>
<td>3.043**</td>
<td>.036</td>
</tr>
<tr>
<td>QOL Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.309</td>
<td>.104</td>
<td>2.975**</td>
<td>.034</td>
</tr>
<tr>
<td>CCI$^a$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.216</td>
<td>.089</td>
<td>2.427*</td>
<td>.021</td>
</tr>
<tr>
<td>2. Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.004</td>
<td>.315</td>
<td>3.184**</td>
<td>.036</td>
</tr>
<tr>
<td>QOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.289</td>
<td>.100</td>
<td>2.892**</td>
<td>.030</td>
</tr>
<tr>
<td>QOL Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.388</td>
<td>.065</td>
<td>6.08**</td>
<td>3, 172</td>
</tr>
<tr>
<td>CCI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginalized$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.861</td>
<td>.472</td>
<td>-1.822</td>
<td>.012</td>
</tr>
<tr>
<td>Integrated$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.987</td>
<td>.419</td>
<td>-2.352*</td>
<td>.020</td>
</tr>
<tr>
<td>Separated$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-2.219</td>
<td>.523</td>
<td>-4.245***</td>
<td>.064</td>
</tr>
</tbody>
</table>

Note: $^a$CCI = Culture Compatibility Index. $^b$Dummy-coded acculturation profiles with Assimilated Profile as the reference group.

*p < .05. **p < .01. ***p < .001

An ANCOVA further investigated SLCI mean differences across acculturation profiles, while adjusting for overall QOL, QOL Control, and Culture Compatibility Index. As expected, the
ANCOVA was significant and mirrored the regression results, $F(3, 172) = 6.083, p = .001$; however, it provided the differences in SLCI means across acculturation profiles. Members of the Assimilated profile exhibited the highest SLCI ($M = 11.69, SE = .308$), while individuals from the Separated profile demonstrated the lowest SLCI ($M = 9.47, SE = .415$), with Integrated ($M = 10.71, SE = .28$) and Marginalized ($M = 10.83, SE = .355$) profiles falling in between. Significant mean differences were observed between the Separated profile and all other profiles, namely Assimilated ($M_{Dif} = -2.219, SE = .523, p = .000$), Marginalized ($M_{Dif} = -1.358, SE = .544, p = .014$), and Integrated ($M_{Dif} = -1.232, SE = .500, p = .015$). The mean difference between the Integrated and Assimilated profiles ($M_{Dif} = -.987, SE = .419, p = .020$) was also significant. Figure 30 displays the estimated marginal means of NA for each of the four acculturation profiles.

![Figure 30. Estimated Marginal Means for Satisfaction with Life in Canada per Acculturation Profile.](image)

When considered together, these results indicated that the Assimilated profile predicted the highest SLCI levels in the sample while Separated profile predicted the lowest SLCI scores. Among the three measures of well-being, the SLCI appeared to be the most affected by acculturation profiles.
I analysed the correlations between the Separated profile and all other variables of this study as an attempt to uncover something unique to the Separated profile that might help explain its tendency to generate low SLCI. Two variables were significantly correlated with the Separated profile, namely, cultural identification of the respondent (Cramér’s $V = .207, p = .021$) and intention prior to immigration (Cramér’s $V = .237, p = .041$). Social support was marginally significant ($Phi = -.143, p = .058$). *Table 18* summarizes respondents’ cultural identification and intention prior to immigration according to acculturation profile. The data showed that the Separated profile had the highest Brazilian identification (89.3%) and the highest frequency of members intending to stay in Canada for a limited time (50%). On the other hand, the Assimilated profile had the highest Canadian identification and the highest frequency of members intending to stay for a long time (15.1%) and become a Canadian citizen (49.1%). These unique characteristics of the two groups may be associated with their extreme SLCI values.

*Table 18*

*Crosstabulation of Cultural Identification and Intention Prior to Immigrating by Acculturation Profile*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cluster&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginalized (n = 38)</td>
</tr>
<tr>
<td>Respondent Cultural identification</td>
<td></td>
</tr>
<tr>
<td>Brazilian</td>
<td>57.9%</td>
</tr>
<tr>
<td>Canadian</td>
<td>2.6%</td>
</tr>
<tr>
<td>Brazilian-Canadian</td>
<td><strong>39.5%</strong></td>
</tr>
<tr>
<td>Intention when Immigrated</td>
<td>(n = 36)</td>
</tr>
<tr>
<td>Stay for a limited time</td>
<td>25.0%</td>
</tr>
<tr>
<td>Stay for a long time</td>
<td>5.6%</td>
</tr>
<tr>
<td>Become a Canadian citizen</td>
<td>41.7%</td>
</tr>
<tr>
<td>No specific plan</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

*Note.*<sup>a</sup> Valid percentage based on cluster’s n for each variable.
Two ANCOVAs with SLCI as the dependent variable, respondent’s cultural identification and intention prior to immigration as fixed factors, and overall QOL, QOL Control, and Culture Compatibility Index as covariates provided further support to the hypothesis that respondent’s cultural identification and intention prior to immigration might help explain the differences in SLCI across acculturation profiles. SLCI scores varied significantly across categories of respondents’ cultural identification, $F(2, 173) = 14.473, p = .000$. Canadian-identified individuals enjoyed higher SLCI ($M = 14.18, SE = 1.06$) than those with a bi-cultural identity ($M = 11.76, SE = .28$) or Brazilian identity ($M = 10.27, SE = .19$). The mean differences between all pairs of respondents’ cultural identification were significant. Similarly, SLCI scores varied significantly across categories of intention prior to immigration, $F(4, 169) = 3.485, p = .009$. Individuals who intended to become a Canadian citizen enjoyed higher SLCI ($M = 11.49, SE = .26$) than those who intended to stay for a long time ($M = 10.72, SE = .54$), had no specific plan ($M = 10.26, SE = .37$), or intended to stay for a limited time ($M = 10.24, SE = .32$). Significant mean differences existed between intention to become a Canadian Citizen and stay for a limited time ($M_{Dif} = 1.25, SE = .42, p = .003$) as well as between intention to become a Canadian Citizen and having no specific plan ($M_{Dif} = 1.23, SE = .46, p = .008$). Given that the Separated profile had the largest Brazilian identification and the highest intention to stay in Canada for a limited time, and that these characteristics are predictive of low SLCI, it is reasonable to expect that Separated individuals would have low SLCI. The opposite is valid for the Assimilated profile, which had the highest frequency of Canadian identification and intention to become a Canadian citizen. Further reflections on these results are presented in the Discussion chapter.
Acculturation profiles’ ability to promote well-being.

Acculturation profiles seemed to portray the complexities of acculturation patterns used by participants and have well-defined relationships with the three measures of well-being. A pattern emerged whereby members of the Assimilated profile seemed to enjoy better well-being, while members of the Separated profile appeared to have the worst outcomes. Table 19 displays the role of acculturation profiles in predicting well-being, as conceptualized as a combination of low NA, high QOL, and high SLCI.

Table 19
Favourability Rank for Acculturation Profiles’ Ability to Promote Well-Being

<table>
<thead>
<tr>
<th>Favourability Rank</th>
<th>Well-being indicators</th>
<th>Low NA</th>
<th>High QOL</th>
<th>High SLCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; (Most favourable)</td>
<td>Assimilated</td>
<td>Assimilated</td>
<td>Assimilated</td>
<td></td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Integrated</td>
<td>Marginalized</td>
<td>Marginalized</td>
<td></td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Separated</td>
<td>Separated</td>
<td>Integrated</td>
<td></td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; (Least favourable)</td>
<td>Marginalized</td>
<td>Integrated</td>
<td>Separated</td>
<td></td>
</tr>
</tbody>
</table>

<sup>Note. a</sup> The QOL analyses were not significant; however, results are displayed here as they follow the overall trend, whereby the Assimilated profile obtained more favourable scores.

These results indicated that opposing views on how to engage with the acculturation process (prioritizing the dominant culture versus prioritizing the ethnic culture) may lead to better or worse well-being, but also raised issues related to social support, cultural identification, and intention prior to immigration as relevant factors to consider when interpreting these results.

Summary of results

The core research question of this study was: What are the associations between acculturation strategies, quality of life, and negative affect? In addition, three supporting questions were investigated: (1) Does Quality of Life mediate the relationship between acculturation strategies and negative affect? (2) Does Quality of Life moderate the relationship between acculturation strategies and negative affect? (3) Which acculturation profiles are more conducive to
well-being, where well-being is represented by low negative affect, high QOL, and high satisfaction with life in Canada?

**Supporting Research Question 1 - Mediation.** The mediation model with QOL as a mediator of the relationship between acculturation profiles and NA was not significant. The requirement for step one was met whereby acculturation profiles successfully predicted NA after controlling for QOL Control, Optimism, and Mental health history. However, the requirement for step two was not met because acculturation profiles failed to predict QOL after controlling for QOL Control, QOL Opportunity, Optimism, and SLCI. This suggests that acculturation profiles do not predict NA indirectly through their relationship with QOL.

**Supporting Research Question 2 - Moderation.** The moderation model was not significant. The interaction terms between QOL and acculturation profiles were not successful in predicting NA above and beyond the variance explained by the control variables (QOL Control, Optimism, and Mental health history). However, the simple effects of QOL and Marginalized profile were significant predictors of NA.

**Supporting Research Question 3 – Acculturation and well-being.** Analyses of the role of acculturation in promoting well-being revealed that acculturation profiles significantly predicted NA and SLCI. Although acculturation profiles did not predict QOL, its results followed the trend of the other two well-being indicators, whereby the Assimilated profile was the most favourable profile in promoting well-being. The Separated profile was the second least favourable or least favourable of the four profiles for all well-being indicators. It appears that an ‘either-or’ approach to acculturation was decisive in whether an individual experienced higher or lower well-being.

**Core Research Question – The relationship between acculturation, quality of life, and negative affect.** The mediation and moderation models suggested that acculturation profiles did not
predict NA because they predicted QOL, which in turn predicted NA or because QOL acted as a buffer of potential negative effects of acculturation profiles on NA. Rather, the results indicated that acculturation and QOL had an independent and direct relationship with negative affect (NA), with QOL explaining more variance in NA scores than acculturation profiles. These results occurred within a context in which antecedent or more stable variables were controlled for such as Mental Health History and Control over QOL. Together, QOL, Mental Health History, and Control over QOL accounted for 48% of NA scores. Acculturation profiles had an important role in predicting well-being, especially low NA and high SLCI. Other factors, such as social support, cultural identification, and intention prior to immigration, emerged from these analyses, corroborating the notion that the role of acculturation profiles in predicting NA and well-being is complex and may offer a myriad of possibilities for intervention. A discussion of these results is the focus of the next chapter.
Chapter 5:
Discussion

This chapter is divided into four sections that reflect on this study’s findings based on its research questions, the impact of personality characteristics and contextual aspects on participants’ well-being, and the risk and protective factors associated with well-being. As an introduction to the four sections, a brief reflection on the general landscape of the results of this study is presented below.

The primary focus of this study was to investigate the associations between acculturation, quality of life, and negative affect as well as the impact of acculturation on the well-being of a group of Brazilian immigrants living in the Greater Toronto Area. This was one of the first studies in Canada, and certainly the first focusing on the Brazilian community, to study acculturation strategies as profiles (i.e., a combination of various strategies through cluster analyses) and that brought together well-established and new aspects of the experience of immigration, resulting in a comprehensive understanding of this complex phenomenon.

The findings of this study were consistent with a few aspects of the existing literature (e.g., Integration as the predominant acculturation profile, low levels of negative affect, and high levels of quality of life and satisfaction with life in Canada), but mostly shed light into new ways of understanding the relationship between acculturation and well-being. For example, the impact of acculturation profiles on the various well-being indicators both confirmed and disconfirmed previous research. With regard to the prevalent acculturation strategy, the Integrated profile had the largest membership, accounting for one third of the total sample. These results corroborated previous results with the Brazilian population in the Greater Toronto Area (Costa, 2008a, 2008b,
2010) as well as a large body of literature on acculturation strategies involving studies with diverse ethnic populations and host countries (e.g., Berry, 1999; Berry et al., 2006; Berry & Sabatier, 2010; Berry & Sam, 2003; E. Kim, 2009; Neto, 2002; Sam, 1994; Schwartz & Zamboanga, 2008). The Separated profile had the smallest membership, consistent with the results of other studies using cluster or latent class analyses with participants from various origins and host countries (Berry et al., 2006), Hispanics in Miami (Schwartz & Zamboanga, 2008), or Chinese living in Canada (Chia & Costigan, 2006). Such studies have found that the Separated profile ranked third or lower among all profiles.

Another aspect from the present study that seemed to be consistent with general literature trends, besides the predominance of Integration profile, was participants’ well-being. The majority of participants reported good well-being, represented by high quality of life, high satisfaction with life in Canada, and low negative affect. It is challenging to compare this study’s results with respect to quality of life with those of other studies (e.g., Thoman & Suris, 2004; Wong et al., 2012; J. Zhang et al., 2009): first, because they use different instruments and scales of measurement; second, because authors often limit their discussion to the influence of acculturation on quality of life, rather than reporting or discussing the quality of life results separately; and third, because even those that do present quality of life levels do not present the possible range of scores against which to compare the results. Nonetheless, with regard to participants’ satisfaction with life in Canada, results were consistent with those observed in a previous study (Costa, 2008a, 2008b, 2010), showing a trend whereby most Brazilians seemed to be satisfied with their lives in Canada.

Regarding negative affect as a well-being indicator, the sample presented similar results to that of the general population in that the majority of participants reported low negative affect. A

30 The four acculturation profiles for the present sample were Integrated, Assimilated, Separated, and Marginalized.
note of caution is warranted here, however; while participants reported overall positive mental health (i.e., depression, anxiety, and stress scales were positively skewed), this sample was substantially more depressed and anxious than the general population. Depression was four times as prevalent in this sample (34.44%) than in the general Canadian population (8%, Health Canada, 2002), while anxiety was twice as prevalent in the sample (24%) than in the general population (12%, Health Canada, 2002). Finally, the endorsement of depression for this sample was higher when compared with a previous study with Brazilian immigrants living in Toronto where 26.6% of the sample endorsed depressive symptoms (Costa, 2008a). While it is important to not over-pathologize immigrants, it is similarly important to bear these reflections in mind to understand the results of this study and its implications for clinical practice.

Perhaps the most important result of this study was its clarification of the role of acculturation strategies in promoting well-being. The results demonstrated that an orientation toward the Canadian culture had an important, but small contribution to participants’ well-being and that the contexts, both socio-cultural and intrapersonal, in which these choices were made, had powerful implications for how well participants fared. These reflections are presented next. Of the four sections in this chapter, the first two expound on the results from the three supporting research questions; the third section discusses the impact of personality and sociocultural factors on well-being; and the final section combines the previous reflections and outlines well-being risk and protective factors.

Results are compared for depression and anxiety as stress may overlap with both conditions.
The role of quality of life in the relationship between acculturation strategies and negative affect

Quality of life was neither a mediator nor a moderator in the relationship between acculturation and negative affect. Changes in participants’ negative affect did not occur because certain acculturation profiles led to changes in quality of life, which in turn triggered variations in negative affect (mediation). In addition, quality of life did not act as a buffer or a booster to potential detrimental or beneficial effects, respectively, of certain acculturation profiles on negative affect (moderation). This indicates that acculturation and quality of life had an independent relationship with negative affect.

The existing literature does not shed light on these findings since QOL (and life satisfaction) has been traditionally studied as an outcome measure (e.g., Janz et al., 2009; Neto, 2001; Scottham & Dias, 2010; Virta et al., 2004) and its mediating and moderating role, to my knowledge, had not been explored up until the present study. The present results, however, offer further support to the notion that the relationship between negative affect and quality of life is bidirectional. This means that while individuals’ quality of life is affected by their mental health, the opposite is also true; that is, high quality of life leads to high emotional well-being (low negative affect). This has also been demonstrated in a study conducted by Boyer and colleagues (2013), where the authors found that higher quality of life predicted lower schizophrenia relapse rates over a period of 24 months.

The protective role of quality of life has important implications for practice since instead of being a passive result of a combination of factors (when seen as an outcome variable), quality of life may become a focus of intervention for the adjustment process of Brazilian immigrants. Similarly, acculturation strategies seem to have a unique and independent contribution to
individuals’ mental health status. The influence of acculturation profiles on well-being is discussed next, followed by a discussion on other factors that contributed to the well-being of participants in this study.

**Acculturation and Well-being**

The relationship between acculturation and well-being is one of the main focuses of acculturation research in the field of psychology (Yoon et al., 2013). In the present study, low negative affect, high quality of life, and high satisfaction with life in Canada (SLCI) were used as indicators of well-being. This section discusses the relationship between acculturation profiles with each of the well-being indicators.

**Acculturation and negative affect.**

The impact of acculturation on negative affect was unequivocal as it was obtained while adjusting for characteristics known to have an influence on negative affect. The Marginalized profile exhibited significantly higher negative affect than the Assimilated and Integrated profiles. The small effect size of the prediction of acculturation profiles on negative affect was consistent with the notion that acculturation strategies are responsible for a small amount of variance of psychological adjustment after controlling for personality characteristics (Ahadi & Puente-Diaz, 2011; Chen et al., 2008), such as optimism and control. The latter may be conceptualized as both internal locus of control and a sense of personal control. It is interesting, however, that of the personality factors, optimism did not influence negative affect scores and sense of control was in fact responsible for a slightly smaller variation in negative affect scores when compared to the impact of the Marginalized acculturation profile on negative affect.

There were important variations in the level of negative affect across most acculturation profiles. Members of the Assimilated profile experienced the lowest levels of negative affect,
followed by the Integrated, Separated, and Marginalized profiles. These results indicate that an orientation toward the dominant culture was protective against negative affect, while disfavouring the dominant culture was a risk factor for having negative affect problems.

These results are largely consistent with the literature in finding that the involvement with the dominant culture, either by means of integration or assimilation, has a protective role in terms of negative affect. A large body of literature emphasizes that integration is associated with lower levels of psychological problems when compared to other strategies (Berry, 1999, 2003; Berry et al., 2006; Coatsworth et al., 2005; David et al., 2009; Jang, Kim, Chiriboga, & King-Kallimanis, 2007; Nguyen & Benet-Martínez, 2013; see Yoon et al., 2013 for a review), while a prioritization of the dominant culture has also been reported to be associated with favorable outcomes (Chia & Costigan, 2006; B. J. Kim et al., 2012; M. J. Miller et al., 2012). For example, a study with Chinese university students in Canada’s west coast found that members of the Assimilated cluster and of the Integrated without Chinese practices cluster experienced lower depression (Chia & Costigan, 2006). Similarly, university students of various Asian ethnicities in the Midwestern United States who subscribed to the Assimilated or Bicultural clusters experienced better mental health in the values domain (M. J. Miller et al., 2012).

The protective role of assimilation and integration was diametrically opposed to the risk associated with the degree of de-prioritization of the dominant culture, as represented here by the Marginalized and Separated profiles’ increased negative affect levels, a trend that has appeared in previous research (e.g., Chia & Costigan, 2006; M. J. Miller et al., 2012). For example, a study involving Korean women in the United States found that the Marginalized profile exhibited higher depressive symptomatology (Choi et al., 2009) than the other profiles, while another study
concluded that members of the Separated profile experienced higher depression in a sample of Chinese mothers living in the United States (Tahseen & Cheah, 2012).

Researchers have reflected on the reasons for specific associations between acculturation profiles and mental health correlates as found in this study. An analysis of the combination of personality and sociocultural context variables for this sample may aid in understanding these results. With regard to personality characteristics, members of the Assimilated profile seem to have an internal locus of control, a characteristic perhaps akin to “high Activity,” which Schmitz and Berry (2011, p. 66) found to be correlated with Assimilation. This allowed them to develop the skills necessary to adjust to a new culture (LaFromboise, Coleman, & Gerton, 1993) and live the life that they chose to live. For example, they had the best-developed English proficiency among all profiles, which is indispensable for a successful assimilation to Canada. The ability to navigate in the culture with which they identify leads to further empowerment and strengthens the belief in their ability to change their life circumstances (sense of control), which are factors associated with more favourable mental health.

With regard to sociocultural aspects, Assimilated individuals counted on three protective factors: (a) low perceived cultural conflict; (b) low perceived discrimination; and (c) high social support. As a result of viewing the Brazilian and Canadian cultures as compatible, Assimilated individuals did not have to grapple with the stresses associated with seemingly irreconcilable cultural differences and the negotiation of identity within this conflict that normally occurs (Benet-Martínez & Haritatos, 2005; LaFromboise et al., 1993). Furthermore, the cultural learning (Berry, 2007) necessary to develop competency in the Canadian culture was likely seen positively, given that they understood the new values and customs as compatible with their heritage ideologies.
The role of discrimination in increasing mental health problems has been well-documented (e.g., Berry & Sabatier, 2010; Yoon et al., 2012). Although this study did not have a specific discrimination measure, the variable ‘do you feel welcome in Canada’ was conceptualized as a correlate of discrimination. From a discrimination perspective, it is not surprising that Assimilated individuals had the lowest levels of negative affect given that they had the lowest reported discrimination, with almost the entire group feeling welcome in Canada. In their study with immigrant youth in Montreal and Paris, Berry and Sabatier (2010) concluded that discrimination precedes and influences both acculturation profile membership and psychological adaptation; that is, the more discrimination, the more orientation toward the ethnic culture and the lower the psychological adaptation. Given that Assimilated individuals wanted to become part of the Canadian society, low discrimination allowed them to realize that goal, feel accepted, and live in a value-consistent way, and thereby experience less negative affect.

While discrimination increases psychological problems, social support and connectedness prevents them (Ayers et al., 2009; B. J. Kim et al., 2012; Jing Zhang & Goodson, 2011). Individuals who can count on others feel less isolated and, from an attachment perspective, are better able to regulate their negative affect (Greenberg, 2004). Nearly all Assimilated participants reported that they had a social support network. This may have provided them with the validation they needed to succeed, feelings of agency and control, and trust in their ability to self-sooth and receive emotional soothing from others in times of hardship. Together, these factors ultimately lead to increased ability to cope (Belizaire & Fuertes, 2011) and less negative affect (Greenberg, 2004). In addition, the combination of low perceived discrimination with high perceived cultural compatibility allowed these individuals to expand their social network to include also Canadian individuals. This, in turn, likely provided them with more means to navigate the Canadian culture,
further fulfilling their goals, increasing social and self-acceptance, and leading to better mental health. This highlights not only the emotional, but also the instrumental effects of social support on preventing negative affect (Greenberg, 2004).

It is no surprise that members of the Assimilated profile had the lowest negative affect, given that they had available a combination of protective factors in their favour. By contrast, members of the Marginalized profile were situated at the opposite end of the spectrum; that is, they reported the highest level of cultural incompatibility and lowest social support. This is likely at the core of the Marginalized profile’s difficulties with negative affect.

The Marginalized profile was overall the most controversial and puzzling to understand, exhibiting seemingly contradictory characteristics. Members of the Marginalized profile endorsed characteristics similar to Assimilated individuals. For example, they wished to become Canadian citizens; they reported the highest identification with being Canadian; they reported the second lowest level of perceived discrimination; and they reported the second highest frequency of English fluency, as well as its use as the exclusive language outside the home. These characteristics portray a Canadian orientation, well beyond what would be expected of the Marginalized profile’s reported low engagement with both the heritage and the dominant culture. These individuals wished to assimilate to Canadian culture, but encountered obstacles in realizing their wishes. For example, their perception of high incompatibility between Brazilian and Canadian cultures and low social support likely undermined the potential benefits of the factors that the Marginalized profile had in common with the Assimilated profile, which prevented them from having the same positive results and, in fact, resulted in higher levels of negative affect.

The high perceived cultural incompatibility experienced by members of the Marginalized profile may have interfered with their ability to foster a social support network with both Brazilian
and Canadian individuals as they likely anticipated not being understood by either group. It is also possible that personality characteristics have influenced Marginalized individuals’ inability to secure a social network necessary to undergo the stresses associated with cultural conflict and learning. Optimism has been found to be strongly related to the NEO Personality Inventory’s agreeableness and extraversion traits (Sharpe et al., 2011), which are related to low intercultural conflict and effective bicultural integration (Benet-Martínez & Haritatos, 2005). Marginalization scores were weakly, but significantly correlated with optimism. The negative correlation suggests that members of the Marginalized profile might have been inclined to perceive intercultural conflict and encounter difficulty negotiating the concomitant acquisition of Canadian culture and maintenance of Brazilian culture.

It is interesting, though not surprising, that most of the members of the Marginalized profile who did not have a social support network perceived the two cultures to be incompatible. Perhaps unable to see compatibility between the Brazilian and Canadian cultures, Marginalized individuals found themselves having no one to turn to for support, resulting in a sense of isolation and disconnection. This lack of social support served as an obstacle to self-soothing, feeling accepted as individuals, and receiving the validation as well as emotional and practical support that comes from meaningful interpersonal connections (Greenberg, 2004): factors that are crucial for successful adaptation to a new culture and for preventing negative affect problems.

The fact that members of the Marginalized profile reported the second lowest perceived discrimination seems inconsistent with the high levels of negative affect reported by Marginalized members. Perhaps, their level of negative affect would have been even higher had they felt less welcome in Canada. Alternatively, the Marginalized profile’s perceived low discrimination might have been overshadowed by the profile’s relatively lower optimism, associated with low cultural
compatibility and difficulty developing a social support network.

The above reflections on the factors that might have contributed to low and high levels of negative affect for members of the Assimilated and Marginalized profiles, respectively, also apply to members of the Integrated and Separated profiles. Even though the Integrated profile had the second highest perceived discrimination, it ranked second in reported social support. Similarly, the Separated profile had the highest perceived discrimination and the second lowest reported social support. Taken together, these results suggest that the decisive factor in preventing negative affect was social support. This hypothesis is corroborated by three findings: (a) discrimination did not play a decisive role in negative affect scores since Integrated and Separated profiles reported higher perceived discrimination and yet had lower negative affect scores; (b) the Separated profile reported having social support more frequently than Marginalized profile, which likely contributed to Separated members having lower negative affect despite experiencing the highest discrimination levels of the four profiles; (c) analysis of covariance indicated that those who reported having no social support were more likely to experience higher negative affect, hence the highest negative affect experienced by members of the Marginalized profile.

Social support has been found to serve as a buffer to risk factors of negative affect. For example, the direct effect of social support was observed in a study of Korean women living in California, where Ayers and colleagues (2009) found that social support had the highest main direct effect on symptoms of depression, by reducing depression scores. Similarly, Dao, Lee, and Chang (2007) found that social support significantly decreased depression symptomatology for female, but not male participants in a sample of Taiwanese International students in the United States. The simultaneous mediating and moderating effect of social support was encountered in a study with immigrant students in Norway (Oppedal et al., 2004). The authors found that family support
mediated the relationship between ethnic culture competence and psychological adaptation, and that classmate support mediated the effect of host culture competence on mental health. In addition, the interaction between family social support and ethnic competence and between friend support and host culture competence was significant to the order that decrease in both led to increased mental health problems. Finally, in a study of Brazilian immigrants living in Boston, the existence of social networks between the origin and destination places not only maintained the emigration flow, but also helped alleviate the “psychological, social and economic costs of immigration” (Siqueira et al., 2010, p. 212 - translation added). These studies just begin to exemplify a plethora of research demonstrating the positive effects of social support on promoting mental health and buffering the potential negative effects of risk factors associated with poor mental health for immigrants as it happened to Separated members in the present study.

Even though the influence of social support on negative affect is so prevalent, preliminary analyses in this study failed to reveal such association, hence its exclusion from regression analyses. This lack of relationship was likely a result of confounding variables not accounted for during exploratory analyses. Subsequently, analysis of covariance, including variables correlated with negative affect, uncovered the unique contribution of social support in preventing negative affect. What remains unclear, however, is the context that led the Marginalized profile to report the lowest social support in the sample, but there are indications that perceiving Brazilian and Canadian cultures as incompatible might have prevented these individuals from connecting with members of either culture. Finally, it is possible that despite social support disparities, other factors inherent to the Marginalized profile might be responsible for its increased mental health problems. The same might be true with respect to the Assimilated profile’s association with lower negative
Further research is required to clarify these issues. The relationship between acculturation profiles and quality of life is discussed next.

**Acculturation and quality of life.**

Acculturation profiles did not predict quality of life above and beyond the effects of negative affect, sense of control, optimism, and satisfaction with life in Canada. The non-significant relationship between acculturation profiles and quality of life in the present study indicates that there are other factors that are more critical in guaranteeing a satisfactory quality of life. These factors will be expounded upon in the section entitled ‘Personality and sociocultural factors that contribute to well-being.’

Despite its non-significance, the relationship between acculturation profiles and quality of life followed the overall trend of this study in terms of the profile associated with best well-being outcomes. Members of the Assimilated profile experienced the highest level of quality of life, consistent with other studies (e.g., Thoman & Suris, 2004). Surprisingly, the Integrated profile enjoyed the lowest quality of life, contradicting previous studies on life satisfaction (Scottham & Dias, 2010; Virta et al., 2004) or studies that use life satisfaction within a composite score of psychological adaptation (e.g., Berry et al., 2006). Another puzzling result was the high quality of life scores for the members of the Marginalized and Separated profiles given these profiles’ association with poor outcomes in the literature. Considering the close association between negative affect and quality of life, it was expected that the influence of acculturation profiles on negative affect would be somewhat replicated on quality of life outcomes; however, this was observed only with regard to the Assimilated profile.

The higher quality of life enjoyed by participants of the Assimilated profile occurred likely due to their increased sense of competency in dealing with the Canadian society as well as in
leading a life which is coherent with their values and expectations. The quality of life scale investigated to what degree individuals were satisfied with their (a) being: one’s psychological health, self-acceptance, and values; (b) belonging: community safety, social support, and access to community resources; and (c) becoming: being functional, entertainment, and self-efficacy. Aspects that guaranteed Assimilated members a low level of negative affect likely also help explain their increased quality of life when the above three domains are considered.

Assimilated individuals’ perceptions that Brazilian and Canadian cultures are compatible decreased the cultural conflict that arises from the need to reconcile potentially incompatible values (Benet-Martínez & Haritatos, 2005; LaFromboise et al., 1993). This low conflict protected them for perceiving that their values were being threatened, thus allowing them to feel satisfied with and accepting of themselves (being domain). Low discrimination and a readily available social support provided Assimilated individuals with a sense of belonging and connectedness (belonging domain). Authors have hypothesized that “some sense of identification and belonging” (Thoman & Suris, 2004, p. 308) contribute to assimilated individuals’ higher life satisfaction. Furthermore, their fluent English proficiency, among other factors, likely assisted in a sense of self-efficacy and increased sense of being functional (becoming domain). The synergy among these factors likely produces an effect on individuals’ quality of life that is more potent than the sum of all factors. For example, their English proficiency coupled with perceived high cultural compatibility allows them to connect with individuals of both cultures, thereby increasing their support network, which provides emotional and practical support, reinforces the belief in cultural compatibility, and boosts satisfaction with all quality of life domains.

Unlike members of the Assimilated profile, Integrated participants, who obtained the lowest QOL scores, seemed unsure about their goals and perhaps lacked the cultural competencies
necessary to successful adaptation. For example, they seem to wish to combine Brazilian and Canadian cultures; yet, they exhibited a predominantly Brazilian orientation and lacked the practical competencies to incorporate Canadian culture. Their high identification with Brazilian culture and highest perception of cultural dissimilarity likely interfered with the becoming domain of quality of life. These factors perhaps challenged their belief in the possibility of combining the two cultures and made the task all the more challenging. Moreover, their lowest English proficiency prevented Integrated participants from attaining the instrumental elements necessary to navigate the Canadian culture. Low proficiency in the dominant culture’s language has been associated with acculturative stress (Belizaire & Fuertes, 2011) and likely impaired the chances of Integrated participants to combine elements of the Canadian culture with of their heritage culture, hence limiting their resources, undermining their sense of self-efficacy, and leading to dissatisfaction, especially in the becoming domain of quality of life.

Analyses at the domain level of quality of life were not possible given the sample size for this study, but should be the focus of future research. It is important to remember that these reflections are speculative rather than conclusive since there were no significant QOL mean differences among the four acculturation profiles.

The lack of significance in the relationship between acculturation profiles and quality of life was surprising, given its predominance in existing literature and previous results obtained by Costa (2008a, 2008b, 2010); however, it seems to be at least partially explained by variations in research design. For example, the lack of relationship between acculturation profiles and quality of life is somewhat consistent with other studies, as the literature is divided between demonstrating

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32 The Integrated profile had the second highest Brazilian identification, highest frequency of Portuguese spoken at home, second lowest English proficiency, highest perception of cultural dissimilarity, highest ambivalence regarding staying in Canada or returning to Brazil.
significant results on the one hand (e.g., David et al., 2009; Janz et al., 2009; Scottham & Dias, 2010; Thoman & Suris, 2004; Virta et al., 2004) and non-significant results on the other (e.g., Ahadi & Puente-Diaz, 2011). This variability in results is likely a product of the variables controlled for in each study. Most studies where acculturation predicted quality of life or life satisfaction did not control for covariates or controlled for SES, demographic, and other miscellaneous variables (e.g., Scottham & Dias, 2010; Virta et al., 2004). These studies did not adjust for personality characteristics or negative affect, such as the variables used in the present study. For example, one study controlling for socioeconomic status and cultural identification variables found that Integration predicted life satisfaction in a sample of Turkish adolescents living in Norway and Sweden (Virta et al., 2004). Another study, which did not include control variables, found that Integration was associated with higher levels of life satisfaction in a sample of Japanese-descent Brazilians living in Japan (Scottham & Dias, 2010). Studies where the relationship between acculturation variables and quality of life were not significant adjusted for personality traits. For example, in a sample of Hispanic college students in the United States, acculturation beliefs (somewhat similar to acculturation strategies) did not predict satisfaction with life above and beyond personality characteristics, particularly extraversion (Ahadi & Puente-Diaz, 2011). It seems that some characteristics of acculturation strategies may overlap or be explained by more stable factors, such as personality characteristics, which when included in the study may uncover the redundancy of the acculturation strategies’ roles in explaining the adjustment of immigrants.

This variability in results according to research design also occurred in the present study, where an exploratory regression analysis without covariates resulted in acculturation profiles significantly predicting quality of life, with all profiles having a significant contribution (see footnote on page 152). That exploratory analysis did not meet the thoroughness of this study and
therefore was not used to demonstrate a significant relationship between acculturating profiles and quality of life. On the other hand, it did demonstrate the importance of contextualizing the impact of acculturation strategies on well-being. It is plausible that studies which did not control for stable factors found spurious results or inflated the contribution of acculturation variables in predicting quality of life.

Other methodological differences further limit comparisons with other studies. For example, as previously mentioned, life satisfaction and quality of life are often used as part of a composite score or indicators of a latent variable of adaptation or subjective well-being and, as a consequence, authors do not report the direct relationship between acculturation and quality of life (e.g., Berry et al., 2006; Chen et al., 2008; Yoon et al., 2012). In addition, the measure used by the majority of studies (e.g., Chen et al., 2008; Scottham & Dias, 2010; Virta et al., 2004) is a five-item scale that assesses general satisfaction with life. The measure used in this study is more complex in that quality of life is assessed across specific areas of life and where satisfaction is weighted based on the importance assigned to each area. These are issues worth exploring in future studies. The following section discusses the impact of acculturation profiles on the third and last well-being indicator, satisfaction with life in Canada.

**Acculturation and satisfaction with life in Canada.**

The QOLP (Quality of Life Profile) and the SLCI (Satisfaction with Life in Canada Index) are both measures of life satisfaction; however, the former is a generic, present-focused instrument, while the latter is immigration-driven and contextualizes life satisfaction appraisal according to pre- and post-immigration circumstances. Given these differences, it was important to determine whether acculturation profiles have different roles in predicting these two forms of life satisfaction.
Acculturation profiles successfully predicted satisfaction with life in Canada over and above the effects of sense of control, general quality of life, and perceptions of culture compatibility. This result is consistent with other studies that found a significant relationship between acculturation variables and life satisfaction (e.g., David et al., 2009; Janz et al., 2009; Scottham & Dias, 2010; Thoman & Suris, 2004; Virta et al., 2004). An important consideration, however, is that acculturation profiles impacted participants’ immigration-driven satisfaction of life in Canada, but not their general quality of life. In fact, the combined acculturation profiles’ effect on satisfaction of life in Canada was more than twice as high as the impact of quality of life on satisfaction with life in Canada. This was surprising, since the latter two constructs are both related to life satisfaction, and a high association was to be expected.

The results indicated that members of the Assimilated and Separated profiles exhibited the highest and lowest levels of satisfaction with life in Canada, respectively, and that these results were related to these profiles’ cultural identification and intention prior to immigration. In particular, self-identification as Canadian and intention to become Canadian citizen, markers of the Assimilated profile, highly contributed to this profile’s higher satisfaction with life in Canada. Conversely, the Separated profile possessed the characteristics found to be risk factors for low satisfaction with life in Canada, namely Brazilian identity and intention to stay in Canada for a limited time.

As with the other two well-being indicators (negative affect and general quality of life), here too, the resolve of Assimilated individuals and the coherence between their goals, the environment where they placed themselves, and their cultural competence (LaFromboise et al., 1993) were instrumental in achieving satisfaction when compared to the other acculturation profiles. Separated individuals seemed to be living in two worlds: one by choice, and the other by
necessity. These individuals resisted the cultural loss associated with assimilation and integration (Berry, 1997) likely due to seeing the two cultures as highly dissimilar and incompatible, which would require a great deal of cultural learning and generate distress should they decide to incorporate elements of Canadian culture into their repertoire (Berry, 2009; LaFromboise et al., 1993). As a consequence of having immigrated to a country where they did not intend to stay or felt ambivalent about staying, after suffering the consequences of discrimination and struggling with the incompatibility between the two cultures, there were few resources left to help them build a satisfying life, where the gap between pre-immigration expectation and post-immigration reality (J. Zhang et al., 2009) was diminished.

Several studies have pointed out the protective role of an ethnic identification in psychological adaptation (e.g., Berry et al., 2006; Obasi & Leong, 2009); yet, for this sample of Brazilian participants, a predominant ethnic identification seemed to be a hindrance. Perhaps, for Separated participants, the combination of ethnic identification and intention to stay for a limited time left them living in a limbo: on the one hand, feeling unmotivated and lacking the cultural competence to enter the new society and obtain the aspired quality of life that brought them here, and on the other hand, perhaps not living where their hearts were. They seem to feel like a fish out of the water and not in their element.

An aggravating factor for Separated individuals was the high perceived discrimination they experienced, particularly considering that discrimination was built in the satisfaction with life in Canada index (the more welcome the higher the SLCI). One might wonder about the directional relationship between discrimination, separation, and low satisfaction with life in Canada. For example, were these individuals discriminated against because they deprioritized Canadian culture? Or did they resort to Brazilian culture as a buffer to cope with the effects of discrimination, as
posed by Phinney (2003)? Berry and colleagues (2006) tested this potential bi-directionality through structural equation modeling. The authors found that perceived discrimination “had a strong effect on ethnic contact, indicating that [it] increases immigrants’ orientation toward their own group” (p. 322). Zhang and colleagues (J. Zhang et al., 2009) explored the role of expectation-reality discrepancy and discrimination on the quality of life of Chinese individuals migrating from rural to urban areas. The expectation-reality discrepancy referred to the perceived discrepancy between pre-immigration expectations and post-immigration reality. The authors found that quality of life was higher for those with lower perceived discrimination and expectation-reality discrepancy. Furthermore, expectation-reality discrepancy partially mediated the discrimination effect of quality of life (J. Zhang et al., 2009), indicating that discrimination increased the expectation-reality discrepancy, which in turn led to low quality of life.

The concepts of discrimination and expectation-reality discrepancy are similar to the ‘feeling welcome’ and ‘expectations met’ items of the SLCI, which gives it its immigration-dependent satisfaction with life assessment. The finding that discrimination increases ethnic orientation and contact (Berry et al., 2006) as well as expectation-reality discrepancy, which compromises quality of life (J. Zhang et al., 2009), seems to fit well with the experiences of Separated individuals. Even if Separated individuals were originally ambivalent about participating in Canadian society, their higher perceived discrimination reinforced their hesitation and likely intensified their identification and connectedness with the Brazilian culture as a way of preserving a strong sense of self. This, however, prevented them from developing the competence in Canadian culture necessary to obtain a satisfying life, which increased the expectation-reality gap and its associated low satisfaction with life in Canada.
The previous two sections explored the associations between acculturation, quality of life, and negative affect, as well as the impact of acculturation profiles on participants’ well-being. It demonstrated that individuals’ negative affect had a direct relationship with acculturation and quality of life. It also demonstrated a trend whereby members of the Assimilated profile experienced lower negative affect and higher quality of life and satisfaction with life in Canada when compared to members of the other three profiles. By contrast, Separated individuals obtained the overall worst outcomes. High social support and low discrimination assisted Assimilated individuals in living well. Do these results mean that being (or remaining) Brazilian is a hindrance and becoming Canadian is the ‘secret’ to immigrants’ positive adjustment? Before attempting to answer this question, the impact of acculturation profiles must be understood within the context of other factors that also influenced participants’ well-being.

**Personality and sociocultural factors that contribute to well-being**

The unique role of acculturation profiles only emerged because a series of factors known to impact well-being were controlled during analyses. These factors included a history of mental health problems, a mutual relationship between negative affect and quality of life, personality characteristics, and sociocultural context. A reflection on the roles of these factors as well as the intersections among them is presented next.

**Mental health history, negative affect, quality of life, and sense of control**

A history of mental health difficulties was the most influential factor in determining levels of negative affect. Its contribution warrants special attention as it is a risk factor for negative affect that can be investigated with questions that are much simpler than questions needed to identify personality characteristics such as sense of control and optimism. It is surprising, therefore, that none of the studies reviewed (e.g., Ahadi & Puente-Diaz, 2011; Chen et al., 2008; B. J. Kim et al.,...
M. J. Miller et al., 2012) used history of mental health in their study design to rule out its confounding role in the relationship between specific acculturation strategies and negative affect or mental health problems.

More than half of the present sample had a history of mental health difficulties. This is almost three times as high as the national estimates, which indicate that one in five, or 20% of Canadians, will experience a mental health or addiction problem in their lifetime (Ratnasingham et al., 2012). These striking numbers are even more worrisome when considering that the onset of mental health problems in Canada was more frequent than the presence of a history both in Brazil and Canada, which was corroborated by a positive correlation between history of mental health problems and time living in Canada. This indicates that the aftermath of immigration may have put participants at increased risk for mental health issues, as immigrants are more susceptible to social exclusion, racism, unemployment, and systemic barriers identified as being social determinants of health (Mikkonen & Raphael, 2010). Perhaps this increased onset of mental health problems after arriving in Canada contributed to this sample’s reporting four times more depression and twice more anxiety than that of general population (Health Canada, 2002).

While a mental health history was associated with negative affect, negative affect had the strongest impact on participants’ quality of life. This is consistent with a large body of literature indicating that the better individuals’ mental health (or the less mental health problems/negative affect), the better quality of life individuals experience (e.g., Friedli, 2009; Frisch, 2004; Lim et al., 2008; Trompenaars et al., 2006; Wong et al., 2012). For example, a longitudinal study with individuals who had a recent first manic episode revealed that the severity of depression symptoms at baseline (among other factors) predicted quality of life at baseline, six months, and 12 months; and depression symptom severity at 12 months predicted quality of life at 18 months (Michalak et
al., 2013). Among immigrant populations, depression was associated with low quality of life accounting for the most variance in quality of life scores in a sample of Chinese immigrants to Hong Kong (Wong et al., 2012).

The relationship between negative affect and quality of life was mutual. Quality of life was the second strongest predictor of negative affect, indicating that the higher the participants’ quality of life, the lower their negative affect. Besides the previously mentioned study by Boyer and colleagues (2013), other studies focusing primarily on immigrant groups have also documented the influence of quality of life on negative affect (e.g., Chou et al., 2011; Costa, 2008a, 2010). Chou and colleagues (2011) found that post-migration quality of life predicted depression at baseline and at the one-year follow-up in a sample of Chinese immigrants in Hong Kong. Similarly, Costa (2008a, 2010) found that satisfaction with life in Canada predicted depression symptoms in Brazilian immigrants living in Canada. The present study provided ample evidence for the bidirectional relationship between quality of life and negative affect whereby they predicted each other in various conditions (mediation, moderation, and simple regression).

Another factor that contributed to participants’ well-being was having a sense of control. In fact, this was the only factor that improved all three well-being indicators. Its most notable impact was on the life satisfaction indicators. Its lower impact on negative affect was inconsistent with studies that argue that stable factors, such as personality characteristics, account for a large portion of the variability of mental health outcomes (e.g., Ahadi & Puente-Diaz, 2011; Chen et al., 2008). However, given that sense of control was largely responsible for individuals’ quality of life, its contribution in lowering negative affect was somewhat redundant with that of quality of life.

The literature suggests that internal locus of control, and having a sense of control, have positive effects on quality of life and good mental health (e.g., Abu-Bader et al., 2011; Axelsson,
Andersson, Edén, & Ejlertsson, 2007; Moradi & Risco, 2006; Neto, 2001), which supports the present findings. Research on non-immigrant populations provides clear evidence for the relationship between control and quality of life (e.g., Axelsson et al., 2007; Girzadas, Counte, Glandon, & Tancredi, 1993; Petito & Cummins, 2000). The influence of control on life satisfaction has been inconsistent in studies with immigrant populations. For instance, control over outcomes had unexpectedly no relationship with quality of life in a study with Chinese immigrants in Hong Kong (Wong et al., 2012); however, having a sense of mastery and control was the best predictor of life satisfaction among Angolan, Cape Verdean, and Indian adolescent immigrants in Portugal (Neto, 2001). The impact of sense of control on negative affect has also been documented (e.g., Abu-Bader et al., 2011; Moradi & Risco, 2006).

The nature of the influence of sense of control on well-being outcomes varies according to cultural values. For example, a study with Japanese and British participants found that even though Japanese respondents reported lower sense of personal control, low control was associated with poor outcomes only for the British participants (O'Connor & Shimizu, 2002). Having a sense of control is part of a Western value system. For the present sample, since the impact of a sense of control on improving well-being was more prominent than several other factors (including optimism, a well-established factor), it seems that Brazilian participants espouse the Western value of personal control, which empowers them to develop the skills and resources to change their life circumstances and deal more actively with obstacles, thus reducing expectation-reality discrepancy (J. Zhang et al., 2009), the effects of potential discrimination, and increasing their optimism of future success.

Participants’ sense of control influenced both quality of life and negative affect. The fact that quality of life’s ability to predict negative affect remained despite the contribution of sense of
control in the regression model and, in fact, surpassed control’s contribution, indicates that by addressing quality of life issues, immigrants may experience relief in negative affect above and beyond any differences in personal control.

Another important aspect regarding the relationship among these variables refers to the determinism associated with having a mental health history. While mental health history was the strongest predictor of negative affect, quality of life was almost as strong. These results indicate that while mental health history was a risk factor for negative affect, its effect can be mitigated by intervening directly in the nine quality of life areas tapped into by the present study. It may also be alleviated by increasing immigrants’ sense of control (since it improves quality of life) and the predictability and empowerment associated with it. As such, these results demystify the determinism associated with a history of mental health issues and suggest that improvements in quality of life may be used as a mental health promotion strategy.

**Personality factors: optimism and sense of control**

Participants’ optimism was investigated to ascertain whether results could be better explained by a personality style whereby individuals may be predisposed to evaluate life circumstances positively or negatively (Scheier et al., 1994). Optimism’s impact on negative affect, quality of life, and satisfaction with life in Canada was surprisingly low, given that it has been strongly linked to well-being (Carver et al., 2010).

Optimism failed to predict negative affect and had a small influence on quality of life scores. It did not enter analyses with satisfaction with life in Canada given their weak correlation. These results are inconsistent with the literature as optimism has consistently predicted mental health outcomes in previous studies (e.g., Bandeira et al., 2002; Scheier et al., 1994). With regard to life satisfaction, optimism was related to good quality of life in previous studies. For example,
extraversion, which is associated with optimism (Sharpe et al., 2011), was the only successful predictor of life satisfaction after acculturation attitudes entered the regression model in a sample of Hispanic students in Texas (Study 1; Ahadi & Puente-Diaz, 2011). Optimism was the strongest positive predictor of overall quality of life in a sample of Chinese immigrants in Hong Kong surpassing the benefits of social support (Wong et al., 2012).

It is possible that the muffled contribution of optimism was due to an overlap of optimism with the other variables. For example, given that optimism has a well-established relationship with mental health (e.g., Bandeira et al., 2002; Scheier et al., 1994) and QOL (Wong et al., 2012), its effect was likely reflected in individuals’ history of mental health and evaluations of quality of life. In addition, the proactive approach usually associated with an optimistic disposition seems to overlap with one of the main features of a sense of control, which is corroborated by the moderate correlation between these two variables in this study. Scheier and colleagues (1994) have documented a similar overlap between sense of control and optimism. The authors found that self-mastery, a sense of being in control over one’s life circumstances, was moderately correlated with optimism to the order of .48 (Scheier et al., 1994): that is, almost 50% of overlap. The shared characteristics between control and optimism likely contributed a great deal to neutralizing optimism’s unique contribution in the present study. Scheier and colleagues (1994) proposed that one way that sense of control differs from optimism is that its trust in positive outcomes is related to a sense of personal responsibility for the outcome.

These results demonstrate that personality characteristics have a strong contribution to well-being as they helped explain a large variance of all three well-being indicators. This is especially true when considering the trickle-down effect of sense of control, whereby it increases quality of life, which in turn, lowers negative affect. The fact that acculturation profiles continue to predict
two of the three well-being measures, after personality characteristic were levelled off, indicates that the results are not a product of participants’ predisposition to seeing life or themselves in a particular way. Between optimism and control, the latter seems to be a more comprehensive personality indicator, since it not only encompasses the trust in positive outcomes that optimism captures, but such trust seems to be a result of believing in one’s ability to take charge and influence outcomes.

Sociocultural context, personality factors, and acculturation profiles.

It would be reasonable to expect that the sociocultural context of well-being would be as important as personality factors; however, the results of this study did not provide strong evidence for this plausible notion. In this study, the sociocultural context was explicitly present in constructs such as discrimination, social support, satisfaction with life in Canada, and perceived opportunities to improve one’s quality of life. Of these, the former two did not enter the main analyses. It would have been redundant to enter discrimination as it was part of satisfaction with life in Canada and social support did not make the moderate correlation cut-off to be included. The two remaining sociocultural factors had a meager contribution and only to the quality of life indicator.

Perceived opportunity to improve quality of life failed to have an impact on participants’ quality of life. Perceived opportunity represented the social context that influenced participants’ quality of life evaluations. High opportunity indicated that the individuals perceived that their immediate and larger social environments provided the necessary opportunities, likely related to power relations and oppression, for quality of life improvement. For example, if a participant perceived that they had few opportunities to improve their quality of life, this would likely mean that they perceived to be in an environment where they could not improve their quality of life even
if they wish to do so. This makes opportunity’s non-significant contribution a surprising result, given that social context seems to be particularly relevant for immigrant communities.

These results do not invalidate the role of sociocultural context in quality of life evaluations, as this was captured by participants’ satisfaction with life in Canada, which had discrimination built into it. However, even the contribution of satisfaction with life in Canada was the weakest when compared to personality factors. It is also intriguing that no sociocultural aspects impacted negative affect at least moderately. This may be a result of overlap with other constructs, but nonetheless, an unexpected finding.

Were personality characteristics more important in individuals’ well-being than sociocultural factors? It seems so. Even if participants did not perceive to have sufficient opportunities to improve their quality of life or if they did not feel satisfied with life in Canada, they could still have a good quality of life if they felt a sense of control over their circumstances. This suggests that high control might compensate for environments with perceived lack of opportunities or where potential oppression or discrimination exists. Sense of control was the most important factor in promoting satisfaction with life in Canada, the second most important factor in guaranteeing quality of life, and a significant contributor to low negative affect. Similarly, individuals who were more optimistic had better quality of life than those who were satisfied with life in Canada, but less optimistic.

With regard to life satisfaction, in particular, having a sense of control seems to be a protective factor to sociocultural problems such as expectation-reality discrepancy, discrimination, and perception of cultural incompatibility. For example, since feelings of control are related to mastery and self-efficacy (Judge, Erez, Bono, & Thoresen, 2002), it is likely that participants with a high sense of control have been able to realize their expectations and therefore reduce their
expectation-reality gap and therefore feel more satisfied with their life in Canada. Similarly, having a sense of control equips immigrants to deal with discrimination in a more active manner as opposed to feeling victimized by the idea of being perceived as lesser than (Fozdar & Torezani, 2008). Even if participants perceived that Brazilian and Canadian cultures were incompatible, a sense of control likely equipped them to negotiate the various aspects of cultural learning in order to live better and be satisfied with their life in Canada.

The positive attitude and sense of responsibility enjoyed by those who felt in control and were optimistic likely increase their participation in society, warding off or mitigating the effects of discrimination and perceptions of cultural incompatibility. It seems that while sociocultural factors have their role in well-being, more stable factors such as sense of control and optimism may surpass and compensate for problems in social context. It is noteworthy that control did not have such vital importance when compared to the role of acculturation profiles. Having a sense of control by itself did not protect participants’ from the effects of the Marginalized profile in increasing negative affect or from the effects of the Separated and Integrated profiles in reducing satisfaction with life in Canada.

The above results demonstrated that while a combination of stable factors, such as personality characteristics and mental health history, for example, may surpass the contribution of acculturation strategies to negative affect and satisfaction with life in Canada, personality factors alone cannot protect individuals from the negative impact of certain acculturation strategies. The only well-being indicator where this conclusion is not valid is quality of life, as acculturation strategies had no impact on quality of life levels. This study, therefore, suggests that Brazilian immigrants may be able to tackle undesirable sociocultural aspects of their lives in Canada if they
have a sense of control and optimism, but even then, they must choose their acculturation strategies wisely.

**Coming full circle: well-being risk and protective factors**

After discussing the associations between acculturation profiles, quality of life, and negative affect, as well as the role of acculturation profiles and other factors in promotion well-being, it is safe to say that: (a) acculturation profiles and quality of life have an independent relationship with negative affect; (b) quality of life and negative affect have a mutually predictive relationship; (c) the Assimilated profile was the most conducive to well-being; (d) the Separated profile was the least conducive to well-being; (e) social support, discrimination, cultural identification, and intention prior to immigration provided the contextual background against which to understand the role of acculturation profiles in predicting well-being; (f) having a sense of control was the only consistent factor associated with all three well-being indicators; (g) personality characteristics (i.e., sense of control and optimism) had a more important role than sociocultural factors in determining well-being; (h) while personality characteristics (i.e., sense of control and optimism) were crucial to well-being, alone they were not powerful enough to protect participants from the negative impact that the Marginalized, Separated, and Integrated profiles had on negative affect and satisfaction with life in Canada.

Quality of life is a protective factor of negative affect, while negative affect is a risk factor for quality of life. Control explained the most variance of satisfaction with life in Canada and was the second strongest predictor of quality of life. Its role seemed diminished in the negative affect analysis likely because of its shared variance with quality of life; however, given that it was one of the strongest predictors of quality of life and quality of life was the strongest predictor of negative
affect (and that quality of life and negative affect had a mutually predictive relationship), one might conclude that the importance of control is stable across well-being indicators.

Even though there were no clear indications of differences in control levels among the four acculturation profiles, Assimilated members seemed to operationalize a sense of personal control more noticeably than other profiles: for example, in their ability to develop competency in Canadian culture, and to surround themselves with a social network that provided emotional and instrumental support and acted as a buffer to potential discrimination (Ayers et al., 2009; B. J. Kim et al., 2012; Jing Zhang & Goodson, 2011). They were also able to seek those experiences that were consistent with their values and found points of compatibility between Brazilian and Canadian cultures that decreased cultural learning and mitigated the potential stress caused by it. It also seems that Assimilated individuals’ pre-immigration intention to stay in Canada for a long time and become Canadian citizens drove them to undergo all these changes and see them as necessary to achieve their goals.

Possibly, the Separated profile’s intention to stay for a limited time was to their disadvantage as it might not have justified the incredible amount of emotional investment involved in incorporating a new culture. It might be enticing to think that these individuals should return to Brazil; however, it is important to understand the context of their immigration. It is puzzling that in a place such as the greater Toronto Area, where multiculturalism seems to be so celebrated and where so many ethnic communities are preserved throughout the city (i.e., Little Italy, Little Korea, Greektown, and Chinatown), Brazilians who wished to remain among Brazilians were not able to do so while preserving their well-being. Perhaps these cultural enclaves, instead of being a celebration of diversity, are a way of keeping the other different and separate, as such leaving doors
open to the increased discrimination that Separated individuals experienced and that hindered their well-being.

Even though Canada has many advantages in terms of social justice and human rights, it is revealing that more than half of participants who reported not feeling welcome in Canada self-identified as being of non-European descent. Discrimination is a reality in Canada and directly affects the health of its population (Mikkonen & Raphael, 2010). On the other hand, within-group discrimination could be even more pervasive. Discrimination against Brazilians by Brazilians was identified as one of the major obstacles to the integration of Brazilians in Ontario (Magalhães et al., 2008). Perhaps members of the Brazilian community find themselves divided in the struggles for survival and, as such, fail to support each other and grow together. Such discrimination and lack of support is possibly even more detrimental as it implies a rejection from one’s own culture, the group with which they identify and to whom they feel loyal. As a result, Separated individuals are at a loss in terms of social support, cannot benefit from self-soothing and other-soothing related to the interdependence (Greenberg, 2004), have decreased ability to cope, and experience more difficulty related to self-acceptance and feelings of control (Belizaire & Fuertes, 2011).

Being Brazilian, becoming Canadian: Was becoming Canadian the answer Brazilian participants found to adjust well to Canada? Was being (or remaining) Brazilian a hindrance to good adjustment? It is important to recall that members of all acculturation profiles preserved a Brazilian orientation to some degree, particularly in terms of observed behaviours. Almost all of them continued to self-identify as Brazilian, even those exhibiting a more Assimilated orientation. Therefore, Brazilian identification and practices should not be considered a hindrance to successful adaptation; rather, it seems that a strictly Brazilian orientation that excludes interactions with the dominant society could be more problematic as it denies the reality of living in a non-Brazilian
society. This, in turn, hinders perceptions of control, as acceptance is related to increased sense of control (Thompson, 2011). Such strict Brazilian orientation, however, might feel less of a choice given the relationship between discrimination and Separation. Furthermore, a Separated individual may still live well in Canada if they possess other elements that contribute to positive well-being.

The causal relationships between discrimination, social support, and acculturation strategies, for example, in the process of adjustment of immigrants was not directly explored by this study and require further in-depth investigation in future research; however, the present study explored the complex interplay between acculturation profiles and the other factors that impacted participants’ well-being. These factors may be separated into risk factors for poor well-being outcomes and protective factors that may help prevent undesirable outcomes or promote desirable ones. The risk factors identified by this study include: previous mental health history (either in Brazil, Canada, or in both countries, but particularly with onset in Canada), absence of social support, high expectation-reality discrepancy, high perceived discrimination, high Brazilian cultural identification, and intention to stay in Canada for a limited time, in addition to an orientation toward Marginalized, Integrated, and Separated profiles as risk factors for negative affect, quality of life, and satisfaction with life in Canada, respectively. Protective factors include: high sense of personal control, adequate social support network, dispositional optimism, low perceived discrimination, high perceived cultural compatibility, high Canadian cultural identification, intention to become a Canadian citizen or stay in Canada for a long time, and an orientation toward the Assimilated profile.
Chapter 6:

Conclusion

This chapter reflects on implications for practice, strengths and limitations of the present study, and directions for future research. It also presents a brief summary and conclusion of this dissertation.

Implications for Mental Health Promotion and Clinical Practice

The results of this study have important implications for policy making and mental health care practice. Clinicians should keep in mind the risk and protective factors outlined in the previous section in order to screen for adaptation problems as well as to tailor their interventions accordingly so as to act both preventatively and correctively. Furthermore, the responsibility for intervention does not lie exclusively on mental health professionals, but also on Brazilian and Canadian governments to implement programs to support a successful adaptation of Brazilian immigrants even before they arrive in Canada. The need for interventions prior to immigration is supported by the association of expectation-reality discrepancy and intention prior to immigrating with poor well-being outcomes. Recommendations for the government and for clinicians based on the risk and protective factors identified are outlined next.

Recommendations for the Canadian and Brazilian governments.

The expectation-reality discrepancy could be dealt with by offering information sessions or fact sheets to potential immigrants during the pre-immigration planning stage. These sessions could educate individuals on the societal obstacles they are likely to face as well as the tools they may use to succeed. The role of an immigration advisor could be particularly helpful to adjust potential immigrants’ expectations and create an action plan with helpful resources and contacts to help achieve strategic goals post-immigration. In terms of culture compatibility, a partnership
between Brazilian and Canadian governments perhaps operationalized by community agencies could provide workshops on promoting an understanding of Canadian culture, developing cultural competence in Canadian values and systems, and devising ways of reconciling differences between Brazilian and Canadian values and customs.

**Recommendations for mental health professionals.**

The comparatively high incidence of mental health problems among participants was alarming, both in terms of lifetime history and current symptomatology. The history of mental health problems was almost three times as high as in the general Canadian population, while the current symptomatology varied from twice to four times as high for anxiety and depression, respectively. These numbers indicate that at least one in two Brazilian immigrants are experiencing or will experience mental health problems in their lifetime and that they are more susceptible to developing depression than anxiety problems. This is a trend that clinicians must keep in mind when working with Brazilian immigrants in community settings, hospitals, and private practices. It highlights the importance of screening immigrants for mental health problems and urges the implementation of preventative measures, some of which are outlined in this section, to counteract these statistics. For example, mental health practitioners must assist their clients in negotiating their expectation-reality discrepancies and perceived cultural incompatibilities in ways that support immigrants in grieving their losses, maintaining a sense of identity, and developing coping strategies to increase well-being.

With regard to coping, different strategies apply depending on whether the risk or protective factors are a matter of predisposition (e.g., optimism) or choice (e.g., intention to stay for a limited time). Predisposition factors may require monitoring, while factors related to choice may be more responsive to intervention. Optimism was one of the predisposition factors in this
study, and as such, it needs monitoring. On the other hand, the fact that its role was overshadowed by the influence of sense of control indicates that the negative effects of low optimism may be counteracted by concrete interventions toward increasing control as described later in this section. Cultural compatibility may also be seen as somewhat stable if we consider that culture is a collective construction; however, in honouring each individual’s participation in this co-construction, individuals’ perceptions and meanings of culture compatibility may be adjusted. For example, the process of grieving losses and creatively developing ways to integrate Brazilian and Canadian cultures could promote changes in immigrants’ culture compatibility perceptions. It seems that the most profound impact in terms of favourable adjustment can be obtained through factors that can be deliberately influenced. These are the development of a social support network and the enhancement of personal control.

Social support is a coping strategy (Oppedal et al., 2004); as such, developing it is a skill that requires planning and practice. Mental health professionals should assist their clients in identifying their support needs and developing the skills necessary to cultivating their support network. To this end, psychoeducation in individual or group sessions may be beneficial. Presenting social support as a coping strategy may not only help depersonalize the lack of social support as a result of personal shortcomings, but also encourage an action-oriented stance. Clarification that social support is simultaneously an emotional and instrumental coping strategy (Greenberg, 2004) may also help immigrants define the types of individuals to include in their network and develop more realistic expectations for each of them that will increase the chances of satisfying their needs. Finally, the overarching theme of self-compassion would assist in skill development while fostering self-soothing.
Control involves stable and changeable aspects. The more stable component of control is related to attributing control internally or externally, while the more changeable aspect of control refers to a contextual sense of control: for example, experiencing a decreased sense of control because the person is in a “low-control” situation (Thompson, 2011), such as while undergoing a major life transition like acculturation. The latter sense of control may be improved by employing control-enhancing strategies. Thompson (2011) stated that individuals may maintain a sense of control by realigning their goals to become more attainable, focusing on areas where they have control, and developing acceptance of their reality. The author further recommended that interventions to foster these three strategies may include stress reduction training, acquiring knowledge related to the challenge at hand, problem-solving skills, planning to increase predictability, providing information regarding available resources and course of adjustment, as well as challenges individuals might encounter, and providing space for active engagement in decisions.

The proposed control-enhancing interventions will likely have a self-reinforcing effect as education and acceptance may help decrease expectation-reality discrepancy, stress management and problem solving may increase self-efficacy, and all of these strategies may involve a group that may provide the template for the social support network that Brazilian immigrants need to prevent poor well-being. Group interventions may also focus on families as parenting or transitioning through developmental stages while acculturating may engender a specific set of challenges. The family may be encouraged to be the social network for each of its members and negotiate ways to preserve and promote an age-appropriate sense of control and agency among all family members. Furthermore, family involvement is paramount for those individuals who do
not possess or value an internal locus of control as control-enhancing coping strategies may be foreign to their psychological make-up.

With regard to the patterns of acculturation strategies, a simplistic intervention would be to encourage assimilation and discourage separation. However, identifying the elements that lead an immigrant toward one or the other strategy is likely more fruitful as it may provide them the opportunity to make a more educated decision as to how they wish to adjust to life in Canada while reclaiming a sense of personal control. For example, someone who deprivitizes Canadian culture because they wish to stay here temporarily may require a different assistance (if any) than someone who deprivitizes Canadian culture due to high perceived discrimination. Furthermore, interventions previously presented will affect Brazilian immigrants’ awareness of the acculturation process and how various strategies may affect adjustment. In particular, psychoeducation regarding the importance of social support, culture compatibility, English proficiency, sense of control, how to deal with discrimination, and how to develop culture competence to navigate the Canadian social system may influence individuals’ acculturation strategies.

Finally, mapping new immigrants’ quality of life on the nine areas covered by the quality of life profile could be an important screening strategy to detect points of intervention. This could be particularly useful as intervention on quality of life areas are often more pragmatic, multidisciplinary, and community-based than mental health interventions.

**Strengths and Limitations of this Study**

Very few studies focusing on the Brazilian community living in the GTA exist (e.g., Brasch, 2010; Costa, 2008a, 2010; Magalhães et al., 2008). To my knowledge, none of them except Costa’s (2008a, 2010) focused on the process of acculturation from a psychological
perspective. The present study not only deepened the understanding on how Brazilians adjust to life in Canada, but in doing so, it contributed to the field of acculturation research. For example, it added to the literature that uses cluster analyses as a better representation of the complex ways in which immigrants navigate between their heritage culture and dominant culture. Even though cluster analysis is sample-dependent and generalizations might not be possible (Choi et al., 2009), the convergence of this study’s clusters with the available theory and research (e.g., Berry et al., 2006; M. J. Miller et al., 2012) indicates a trend.

This study also used a combination of variables not used in the literature reviewed, including personality correlates that when not controlled for might inflate the contribution of acculturation on outcome variables (Ahadi & Puente-Diaz, 2011). The inclusion of variables such as sense of control, optimism, and mental health history helped uncover the unique contributions of acculturation strategies and elucidated several paths for interventions that will be crucial for the successful adaptation of Brazilian immigrants in the Greater Toronto Area.

The availability of research measures in both English and Portuguese was another strength of this study, as it likely reduced the impact of low language proficiency on participation and data reliability. In fact, this may have contributed to the overall good to excellent reliability (see George & Mallery, 2003 for a classification of reliability levels) observed across measures. Yoon and colleagues (2011) have raised the issue of survey language, stating that the majority of studies conducted in the United States offered questionnaires only in English while three quarters of the target populations spoke their native language at home. The present study reiterates the importance of offering surveys in the language of the group being studied as 84.4% of participants chose to answer the survey in Portuguese even though almost the entire sample (96.7%) had between intermediate and fluent English proficiency.
The predominantly online and virtual snowballing nature of participant recruitment posed both advantages and disadvantages. It expedited data collection, allowed participants to respond to the survey at their convenience, provided a far-reaching strategy to divulge the study, and offered more anonymity than face-to-face recruitment and data collection strategies. On the other hand, the lack of personal contact might have raised suspicion from potential undocumented participants, who would naturally benefit from having a trusting relationship with the researcher. This might help explain the low participation of this group (8.9%), even though it was slightly higher than in previous quantitative studies with the Brazilian community in the GTA (Costa, 2008a, 2010; Magalhães et al., 2008), which reported that undocumented participants accounted for 7% of their final samples.

Virtual snowballing also contributed to forming a community sample as opposed to samples comprised of college students, which are common in this type of research (Yoon et al., 2011). This however, may have contributed to some sampling issues. For example, this might be associated with a restricted score range for quality of life and negative affect, which might have influenced the results of the mediation and moderation analyses (Frazier, Tix, & Barron, 2004). Perhaps recruitment at mental health clinics, general hospitals, and mainstream newspapers would have captured a wider range of experiences, from Brazilians who feel connected to a social support network, to those struggling with mental or physical health issues, to those who feel more isolated. Furthermore, this sample was relatively new to Canada, with half of the participants being here for a maximum of four years. Length of residence may impact acculturation experiences (Berry et al., 2006). While analyses did not reveal such association in the present study, this provides a specific context within which to situate the results. These
potential sampling biases should be ideally monitored throughout the recruitment process and deviations should trigger oversampling of extreme scores in order to increase score variability.

Other limitations should be kept in mind when interpreting the results of this study. First, this was a lengthy survey (192 questions) and the order in which measures were presented was not balanced, which might have led to fatigue and insufficient effort responding. This limitation was addressed by using a predetermined set of procedures to guarantee data quality assurance strategies, such as inconsistent and uniform responding, and deal with missing data. Second, in order not to overburden respondents, measures of acculturation stress, discrimination, and social support were omitted from the pool of questionnaires. These are important variables in the study of the relationship between acculturation and well-being (Belizaire & Fuertes, 2011; Berry & Sabatier, 2010; Caplan, 2007; Juang & Cookston, 2009; Oppdal et al., 2004; Salgado et al., 2012; Yoon et al., 2008). This omission was somewhat mitigated by questions of the ICQ-R (Immigration Context Questionnaire - Revised), such as those about feeling welcome in Canada and having a social support network. Although the general experience of stress was focus of the Depression Anxiety Stress scale, in particular the stress subscale (DASS-Stress), the stress associated specifically with acculturation was not addressed and should be included in future research. The following section contains recommendations to address these limitations.

**Future Research**

Despite the recent number of studies, much is still unknown about Brazilians living in the Greater Toronto Area. Future research with Brazilian immigrants may need to address issues related to sampling. Larger samples, more even number of participants across acculturation profiles, and oversampling of extreme values particularly related to outcome and intervening variables would contribute with increasing overall power of statistical analyses (Frazier et al.,
A larger sample would also allow for analyses using the quality of life domains, not performed here in order to preserve statistical power. Furthermore, it would be conducive to more complex research designs, such as Structured Equation Modelling (SEM), in order to better capture and define the complex relationships between acculturation strategies, discrimination, social support, quality of life, negative affect, and personality variables. It seems to be of particular importance to establish chronological associations as these have significant relevance for practice.

The ubiquitous influence of sense of control on well-being provided compelling evidence that its use and the inclusion of other stable factors in future acculturation research is fundamental (Ahadi & Puente-Diaz, 2011; Chen et al., 2008). In fact, this study revealed that the traditionally used demographic and SES covariates did not have a significant relationship with any of the main predictors and outcome variables. In addition, SEM analyses would help ascertain the direct and indirect effect of stable factors on acculturation strategies, outcome variables, and other predictors such as perceived discrimination and social support. With regard to well-being, the use of separate indicators in addition to composite scores of multiple indicators is recommended. For example, in this study, the Marginalized profile was associated to poor outcomes only in terms of negative affect, but not with respect to quality of life and satisfaction with life in Canada. The use of separate outcomes would assist in identifying differences in the influence of acculturation strategies according to outcome, which would result in more specific implications for practice.

Future studies may need to find a balance between comprehensiveness of measures and number of measures in order to reach a breadth and depth of participants’ experiences. Perhaps, a compromise could involve using shorter acculturation strategies and quality of life measures so
that acculturative stress, perceived discrimination (both from the dominant and heritage groups), and social support scales can be introduced. Measures of positive affect and adaptive coping could also add to the understanding of the benefits of specific ways of acculturating.

The utilization of cluster analyses shed light on the patterns of acculturation strategies used by Brazilian immigrants; however, their complexities raised a number of questions that can only be addressed by a mixed method study. For example, the Marginalized profile did not follow the diffuse or undifferentiated patterns suggested by a few other studies (e.g., Berry et al., 2006; Schwartz & Zamboanga, 2008; Tahseen & Cheah, 2012) and did not clearly follow the hypothesized de-prioritisation of both Brazilian and Canadian cultures. Rather, members of the Marginalized profile seemed to have a strong Assimilated orientation while lacking the social support to operationalize this orientation. This hypothesis can only be verified by interviewing individuals classified into the Marginalized profile, hence the mixed method approach. Focus groups might aid in these efforts as they would certainly add a relational conceptualization of the process of acculturating to Canada. Moreover, longitudinal studies might help address differences in the use of acculturation strategies throughout time and how they relate to changes in outcomes.

In a study with the Brazilian community in Ontario, Magalhães and colleagues (2008) identified four barriers to the integration of Brazilians in Ontario: misinformation of Canadians with regard to Brazil and Brazilian culture; discrimination within the Brazilian community; Brazilians’ lack of information regarding Canadian social practices, and difficulty befriending Canadians. The present study shed light on the obstacles related to Brazilians immigrants and how psychologists, community workers, and the government may assist in tackling these obstacles. The barrier related to the misinformation of Canadians regarding Brazil and the
Brazilian culture was not the scope of this study and it remains to be explored in future research. Such study would highlight the process of acculturation as impacting both the heritage and dominant cultures and would help design interventions at the social level contributing to increasing awareness of how Canadians and Canadian values and systems impact the adjustment of new immigrants.

Lastly, it is important that research focusing on the mental health of the Brazilian community continues, as this seems to be a group with increased risk of mental health problems. Continued efforts to obtain participation from immigrants with precarious status (both documented and undocumented) should be a priority. Brazilian immigrants would benefit from the development of a validated well-being screening measure to identify those at risk of developing adjustment problems. The risk and protective factors listed at the end of the discussion chapter provide an initial template for such measure.

Summary and Final Remarks

This study added to the scarce literature on the Brazilian immigrant community and helped increase the understanding of the patterns of acculturation strategies this community uses in the process of adjusting to life in Canada. In particular, this sample favoured strategies that prioritize Canadian culture, such as Integration and Assimilation. Regardless of the predominant acculturation profile they exhibited, the majority of participants still preserved their Brazilian roots to varying extents. The Assimilated profile was associated with lower negative affect and higher satisfaction with life in Canada. Even though acculturation profiles did not significantly predict quality of life, members of the Assimilated profile reported the highest quality of life.

The association between Assimilation and more favourable well-being was related to having increased sense of control, higher cultural competence, availability of a social support
network, decreased discrimination, and intention prior to immigration to become a Canadian citizen. Members of the Assimilated profiles were able to live in a value-consistent way in which their goals and preferences matched the skills necessary to achieve these goals, which in turn led to more favourable outcomes. Quality of life did not mediate or moderate the relationship between acculturation profiles and negative affect, indicating that quality of life and acculturation profiles have a direct relationship with negative affect and as such provide different points of intervention.

Protective and risk factors were identified as having important implications for clinical and community practice. In particular, psychoeducation regarding pre-immigration planning; Canadian practices; development of cultural competence in Canadian values and systems, including English proficiency; effects of acculturation strategies on adjustment, and the development of coping strategies related to social support network and sense of personal control were identified as effective ways to protect against risk factors while bolstering protective factors associated with good outcomes. To this end, the involvement of family and group interventions is encouraged as a way of creating social support network templates that are fundamental to well-being.

Brazilians in this sample exhibited higher risk for mental health problems than the general Canadian population. Investment in clinical interventions pre- and post-immigration, involvement of both governments in policies and service offerings, as well as continued research is needed to both increase understanding of the needs of this community and test interventions that better address these needs and mitigate the negative effects of immigration.
References


Australian Centre for Posttraumatic Mental Health. (n.d.). Depression Anxiety and Stress Sale (DASS) Retrieved April 26, 2013, from

*Menopause, 14*(4), 708-716. doi: http://dx.doi.org/10.1097/gme.0b013e318030c32b


doi:10.1186/1475-9276-6-1


Bergmann, A. (n.d.). World's largest economies from

International Review/Psychologie Appliquee: Revue Internationale, 46(1), 5-34.

Evans (Eds.), Cultural clinical psychology: Theory, research, and practice. (pp. 39-57).
New York: Oxford University Press.


G. Marin (Eds.), Acculturation: Advances in theory, measurement, and applied research.


(Eds.), Acculturation and parent-child relationships: measurement and development (pp.

the Tallinn Conference on Conceptualising Integration, Tallin, Estonia.

Relations, 32(4), 328-336. Retrieved from


through Counselling and Psychotherapy. Toronto: Centre for Diversity in Counselling and Psychotherapy.


Athens area. *International Journal of Social Psychiatry*, **54**(4), 338-349. doi:

http://dx.doi.org/10.1177/0020764008090288


http://www.caisbrasil.org/wp-content/uploads/2012/05/BMTC_Relat%C3%B3rio%20FINAL_July%202008_port.pdf


http://search.proquest.com/docview/1288752884?accountid=14771


Acculturation and the Center for Epidemiological Studies-Depression Scale for Hispanic women. *Nursing Research*, **60**(4), 270-275. doi:

http://dx.doi.org/10.1097/NNR.0b013e318221b8dc


http://dx.doi.org/10.1037/a0021374


Quality of Life Research Unit. (n.d.). The Quality of Life Model Retrieved October 25, 2009, from [http://www.utoronto.ca/qol/concepts.htm](http://www.utoronto.ca/qol/concepts.htm)


Salgado, H., Castaneda, S. F., Talavera, G. A., & Lindsay, S. P. (2012). The role of social support and acculturative stress in health-related quality of life among day laborers in...


Statistics Canada. (2006b). Detailed Country of Citizenship, from
http://www12.statcan.gc.ca/censushrecensement/2006/dp-pd/tbt/Rp-
eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GiD=
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&SUB=0&Temporal=2006&THEME=72&VID=0&VNAMEE=&VNAMEF=

310-x2011001-eng.pdf

N.J: Lawrence Erlbaum Associates.

bidimensional model of acculturation for examining differences in family functioning and
27(4), 405-430. Retrieved from
http://journals1.scholarsportal.info.myaccess.library.utoronto.ca/tmp/2576992997706736

Tahseen, M., & Cheah, C. S. L. (2012). A multidimensional examination of the acculturation and
psychological functioning of a sample of immigrant Chinese mothers in the US.
*International Journal of Behavioral Development, 36*(6), 430-439. doi:
http://dx.doi.org/10.1177/0165025412448605


Appendices

Appendix A.
Updated Acculturation Strategy Results of Costa, 2008a, 2008b, 2010

The scores of each of the acculturation strategies subscales were obtained by simple mean calculation. Possible scores ranged from 1 to 5, with the lowest score representing full disagreement with that strategy. Integration, Assimilation, and Separation scores were normally distributed. Integration scores ranged from 1.9 to 5, with a mean score of $M = 3.36$ ($SD = .72$). Assimilation scores had minimum and maximum values of 1.29 and 4.71, respectively, with a mean of $M = 2.67$ ($SD = .65$). Separation Strategy scores ranged from 1 to 4.36 with a mean score of $M = 2.59$ ($SD = .73$). Marginalization scores were highly positively skewed with scores ranging from 1 to 3.43 and a median score of 1.54. These results indicate that participants provided very low endorsement for this strategy.

When median magnitude was considered, Integration (median = 3.25) was the highest scoring strategy while Marginalization obtained the lowest scores (median = 1.36). Separation (median = 2.71) and Assimilation (median = 2.64) fell in between as second and third places, respectively. Figure 1 presents the four strategies organized by ascending medians.

Figure A1. Median Comparison of the four acculturation strategies.
Appendix B.
Research Measures – English Version

QUESTIONNAIRE OF DEMOGRAPHIC DATA, SHORT VERSION (QDD-S)

INSTRUCTIONS:
Please answer the following questions as accurately and honestly as possible. Please try to answer each question as best you can since that makes your data more useful. ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. What is your gender?

☐ 1. Male  ☐ 2. Female  ☐ 3. Prefer Not to Answer

2. What is your age?

3. Are you currently...

☐ 1. Common-law
☐ 2. Legally married
☐ 3. Dating
☐ 4. Single
☐ 5. Separated/Divorced
☐ 6. Widow/er
☐ 7. Prefer Not to Answer

4. Is your partner...

☐ 1. Brazilian
☐ 2. Portuguese
☐ 3. Canadian
☐ 4. Latin-American
☐ 5. Not applicable
☐ 6. Other – Please specify: _____________________________________________
☐ 7. Prefer Not to Answer

5. What is your current status in Canada?

☐ 1. Landed immigrant/Permanent resident
☐ 2. Refugee claimant
☐ 3. Refugee
☐ 4. Immigrant without immigration documents
☐ 5. Canadian Citizen
☐ 6. Work visa
6. Do you consider yourself…

- Aboriginal Brazilian
- African Brazilian
- European Brazilian
- Asian Brazilian
- Middle-Eastern Brazilian
- Latin American
- Other – Please specify: _________________________________________________
- Prefer Not to Answer

7. Do you consider yourself…

- Brazilian
- Canadian
- Brazilian-Canadian
- Prefer Not to Answer

8. What region of Brazil are you from?

- North
- Northeast
- Center-West
- Southeast
- South
- Prefer Not to Answer

9. Do you currently reside in the GTA?

- No
- Yes

10. What is your highest level of education?

- Elementary school
- Some high school
- High school diploma (or GED)
- Trades certificate or diploma
- Some College
- 2-year college degree
- 4-year college/university degree (Bachelor's)
- Master's degree
9. Doctoral degree
10. Professional degree (e.g. MD)
11. Prefer Not to Answer

11. Are you currently...

1. Studying
2. Working (not in my field)
3. Working (in my field)
4. Unemployed
5. Retired
6. Stay-at-home mother/father/caregiver
7. Prefer Not to Answer

12. Your profession is in the field of...

1. Trades (construction, forklift operation, etc.)
2. Business (administration, finance, etc.)
3. Social Sciences
4. Health Sciences
5. Arts and Humanities
6. Retail
7. Other – Please specify: __________________________________________
8. Prefer Not to Answer

13. What is your current annual income (in Canadian dollars)?

1. Less than $20,000
2. $20,000-$39,999
3. $40,000-$59,999
4. $60,000-$79,999
5. $80,000-$99,999
6. $100,000 or higher
7. Prefer Not to Answer

14. What is your current household annual income (in Canadian dollars)?

1. Less than $20,000
2. $20,000-$39,999
3. $40,000-$59,999
4. $60,000-$79,999
5. $80,000-$99,999
6. $100,000 or higher
7. Prefer Not to Answer
IMMIGRATION CONTEXT QUESTIONNAIRE – Revised (ICQ-R)

INSTRUCTIONS:
Please answer the following questions as accurately and honestly as possible. Please try to answer each question as best you can since that makes your data more useful. ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How long have you been in Canada (e.g. 'x' years and 'x' months)?
   _______ years and _______ months
   □ Prefer Not to Answer

2. Where you born in Brazil?
   □ 1. No
   □ 2. Yes

3. How long did you live in Brazil (e.g. 'x' years and 'x' months)?
   _______ years and _______ months

4. How old were you when you immigrated to Canada?
   ________________________________________________________

5. Why did you decide to leave Brazil?
   □ 1. Seeking better job opportunities
   □ 2. Seeking Safety
   □ 3. Better opportunities for family
   □ 4. Accompanying parent/spouse
   □ 5. Seeking adventure
   □ 6. Employment mandate
   □ 7. Political reasons
   □ 8. Forced by others or circumstances
   □ 9. Academic
   □ 10. Economic reasons
   □ 11. Other – Please specify: ____________________________________________
   □ 12. Prefer Not to Answer
6. Why did you choose to live in Canada?

- 1. Reunite with family members
- 2. Accompanying someone, therefore there was no other choice
- 3. Employment mandate, therefore there was no other choice
- 4. Liked the culture
- 5. Liked the people
- 6. Better educational opportunities
- 7. Better professional opportunities
- 8. Easier to make money
- 9. Easier to get a visa/to be accepted as an immigrant than other countries
- 10. Other – Please specify: ________________________________
- 11. Prefer Not to Answer

7. What was your original intention when you decided to move to Canada?

- 1. To stay for a limited time
- 2. To stay for a long time
- 3. To become a Canadian citizen
- 4. No specific plan
- 5. Other – Please specify: ________________________________
- 6. Prefer Not to Answer

8. Do you feel that the expectations you had before moving to Canada have come, are coming or will come true?

- 1. Not at all
- 2. A little bit
- 3. Somewhat
- 4. Pretty much
- 5. Very much
- 6. Prefer Not to Answer

9. What is the main language that you speak at home?

- 1. Portuguese
- 2. English
- 3. Portuguese and English
- 4. Other – Please specify: ________________________________
- 5. Prefer Not to Answer
10. What is the main language that you speak outside your home?

- [ ] 1. Portuguese
- [ ] 2. English
- [ ] 3. Portuguese and English
- [ ] 4. Other – Please specify: __________________________________________________
- [ ] 5. Prefer Not to Answer

11. What is your level of proficiency in **Portuguese**?

- [ ] 1. Beginner
- [ ] 2. Intermediate
- [ ] 3. Advanced
- [ ] 4. Fluent
- [ ] 5. Prefer Not to Answer

12. What is your level of proficiency in **English**?

- [ ] 1. Beginner
- [ ] 2. Intermediate
- [ ] 3. Advanced
- [ ] 4. Fluent
- [ ] 5. Prefer Not to Answer

13. How was your overall level of English before immigrating to Canada?

- [ ] 1. Beginner
- [ ] 2. Intermediate
- [ ] 3. Advanced
- [ ] 4. Fluent
- [ ] 5. Prefer Not to Answer

14. Did you have a job in your field in Brazil?

- [ ] 1. No, but had a job in another field
- [ ] 2. No, never had a job in Brazil
- [ ] 3. Yes
- [ ] 4. Prefer Not to Answer

15. Your first job in Canada was…

- [ ] 1. In your field
- [ ] 2. In another field
- [ ] 3. Have not found a job yet
- [ ] 4. Have not looked for a job yet
- [ ] 5. Prefer Not to Answer

16. Do you feel that you have a group of friends or family that you can turn to for support?

- [ ] 1. No
- [ ] 2. Yes
- [ ] 3. Prefer Not to Answer
17. If you responded ‘YES’, please specify if the MAJORITY of these individuals are…

- 1. Brazilian
- 2. Portuguese
- 3. Canadian
- 4. Latin-American
- 5. Not applicable
- 6. Other – Please specify: __________________________________________________
- 7. Prefer Not to Answer

18. Do you CURRENTLY access any of the services available to the Brazilian community in the GTA?

- 1. No
- 2. Yes
- 3. Prefer Not to Answer

19. Generally speaking, do you think that Brazilian and Canadian cultures are alike?

- 1. Not at all
- 2. A little bit
- 3. Somewhat
- 4. Pretty much
- 5. Very much
- 6. Prefer Not to Answer

20. Do you think that Brazilian and Canadian cultures are compatible?

- 1. Not at all
- 2. A little bit
- 3. Somewhat
- 4. Pretty much
- 5. Very much
- 6. Prefer Not to Answer

21. Do you feel welcome in Canada?

- 1. Not at all
- 2. A little bit
- 3. Somewhat
- 4. Pretty much
- 5. Very much
- 6. Prefer Not to Answer

22. Are you satisfied with your life in Canada?

- 1. Not at all
- 2. A little bit
- 3. Somewhat
- 4. Pretty much
- 5. Very much
- 6. Prefer Not to Answer

23. Do you plan to return and live in Brazil?
24. Have you ever been diagnosed with **DEPRESSION** by a medical doctor, a psychiatrist, or a psychologist?

<table>
<thead>
<tr>
<th></th>
<th>1. No</th>
<th>2. Yes, in Brazil only</th>
<th>3. Yes, in Canada only</th>
<th>4. Yes, both in Brazil and in Canada</th>
<th>5. Yes, in another country only</th>
<th>6. Prefer Not to Answer</th>
</tr>
</thead>
</table>

25. Have you ever been diagnosed with **ANXIETY** by a medical doctor, a psychiatrist, or a psychologist?

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<tr>
<th></th>
<th>1. No</th>
<th>2. Yes, in Brazil only</th>
<th>3. Yes, in Canada only</th>
<th>4. Yes, both in Brazil and in Canada</th>
<th>5. Yes, in another country only</th>
<th>6. Prefer Not to Answer</th>
</tr>
</thead>
</table>

26. Have you ever been diagnosed with **STRESS** by a medical doctor, a psychiatrist, or a psychologist?

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<th></th>
<th>1. No</th>
<th>2. Yes, in Brazil only</th>
<th>3. Yes, in Canada only</th>
<th>4. Yes, both in Brazil and in Canada</th>
<th>5. Yes, in another country only</th>
<th>6. Prefer Not to Answer</th>
</tr>
</thead>
</table>

27. Have you ever seen a psychologist/psychotherapist/psychiatrist for more than 3 months, due to emotional difficulties, such as depression, anxiety, or stress?

<table>
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<tr>
<th></th>
<th>1. No</th>
<th>2. Yes, in Brazil only</th>
<th>3. Yes, in Canada only</th>
</tr>
</thead>
</table>
28. Have you ever been hospitalized due to emotional difficulties, such as depression, anxiety, or stress?

1. No
2. Yes, in Brazil only
3. Yes, in Canada only
4. Yes, both in Brazil and in Canada
5. Yes, in another country
6. Prefer Not to Answer

29. Have you ever taken medication for depression, anxiety, or stress?

1. No
2. Yes, in Brazil only
3. Yes, in Canada only
4. Yes, both in Brazil and in Canada
5. Yes, in another country
6. Prefer Not to Answer

30. Are you currently taking medication for depression, anxiety, or stress?

1. No
2. Yes
3. Prefer Not to Answer
ACCULTURATION STRATEGIES SCALE (ASSc)

INSTRUCTIONS:
Here are some statements about language, cultural traditions, friendships, etc. Please indicate to what extent you agree or disagree with each statement, by selecting the answer that applies more to your case.

Please try to answer each question as best you can since that makes your data more useful. ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

* Some questions may appear repetitive; however, each question measures something different. Please do your best to answer all questions.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have more Canadian than Brazilian friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>I think that children of Brazilians living in Canada should learn both Brazilian and Canadian values and customs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>I would rather have more Canadian than Brazilian friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>I would marry a Canadian rather than a Brazilian</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>I prefer social activities that involve more Canadians than Brazilians</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>I think that children of Brazilians living in Canada should learn Brazilian rather than Canadian values and customs</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>7</td>
<td>I would marry a Brazilian rather than a Canadian</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>8</td>
<td>I would neither marry a Brazilian nor a Canadian</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>9</td>
<td>I think that children of Brazilians living in Canada should learn Canadian rather than Brazilian values and customs</td>
<td>1</td>
<td>2</td>
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<tr>
<td>10</td>
<td>I have more Brazilian than Canadian friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>I think that children of Brazilians living in Canada should learn neither Brazilian nor Canadian values and customs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>I take part in social activities that involve more Canadians than Brazilians</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>I would rather have neither Brazilian nor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Some questions may appear repetitive; however, each question measures something different. Please do your best to answer all questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. I prefer social activities that involve both Brazilians and Canadians</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I do not have either Brazilian nor Canadian friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16. I would rather not take part in either Brazilian or Canadian social activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17. I would rather eat both Brazilian and Canadian food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>18. I do not take part in either Brazilian or Canadian social activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19. I would rather have more Brazilian than Canadian friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20. I prefer social activities that involve more Brazilians than Canadians</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>21. I eat both Brazilian and Canadian food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>22. I prefer the Canadian ways of treating differences between men and women more than the Brazilian ways</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>23. I take part in social activities that involve more Brazilians than Canadians</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>24. I would rather eat Canadian than Brazilian food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>25. I speak more Portuguese than English in my daily life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>26. I eat more Canadian than Brazilian food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>27. I prefer the Canadian ways of treating differences between ethnicities more than the Brazilian ways</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>28. I would rather not eat either Brazilian or Canadian food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>29. I use more the Canadian ways of treating differences between men and women than the Brazilian ways</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>30. I prefer the Brazilian ways of treating differences between ethnicities more than</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
* Some questions may appear repetitive; however, each question measures something different. Please do your best to answer all questions.

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>I would rather eat Brazilian than Canadian food</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>It is more important to me to speak English well rather than Portuguese</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>I eat more Brazilian than Canadian food</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>I use the Brazilian ways of treating differences between ethnicities more than the Canadian ways</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>I do not prefer either the Canadian or the Brazilian ways of treating differences between men and women</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>I do not use either the Canadian or the Brazilian ways of treating differences between ethnicities</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>I use the Brazilian ways of treating differences between men and women more than the Canadian ways</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>I speak more English than Portuguese in my daily life</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>I do not prefer either the Canadian or the Brazilian ways of treating differences between ethnicities</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>I do not eat either Brazilian or Canadian food</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>I prefer the Brazilian ways of treating differences between men and women more than the Canadian ways</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>I use the Canadian ways of treating differences between ethnicities more than the Brazilian ways</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>I use both Brazilian and Canadian ways of treating differences between men and women</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>I do not speak either Portuguese or English in my daily life</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
* Some questions may appear repetitive; however, each question measures something different. Please do your best to answer all questions.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.</td>
<td>I prefer both Brazilian and Canadian ways of treating differences between ethnicities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>46.</td>
<td>It is more important to me to speak Portuguese well than English</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>47.</td>
<td>I prefer both Brazilian and Canadian ways of treating differences between men and women</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>48.</td>
<td>I use both Brazilian and Canadian ways of treating differences between ethnicities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>49.</td>
<td>It is not important to me to speak either Portuguese or English well</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>50.</td>
<td>I do not use either the Canadian or the Brazilian ways of treating differences between men and women</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE (CES-D)

INSTRUCTIONS:
Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week by selecting the appropriate answer.

DURING THE PAST WEEK:

<table>
<thead>
<tr>
<th></th>
<th>RARELY or NONE of the time (less than 1 day)</th>
<th>SOME or a LITTLE of the time (1-2 days)</th>
<th>OCCASIONALLY or MODERATELY amount of the time (3-4 days)</th>
<th>MOST or ALL of the time (5-7 days)</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>I was bothered by things that usually don’t bother me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>02.</td>
<td>I did not feel like eating; my appetite was poor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>03.</td>
<td>I felt that I could not shake off the blues even with help from my family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>04.</td>
<td>I felt that I was just as good as other people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>05.</td>
<td>I had trouble keeping my mind on what I was doing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>06.</td>
<td>I felt depressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>07.</td>
<td>I felt that everything I did was an effort</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>08.</td>
<td>I felt hopeful about the future</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>09.</td>
<td>I thought my life had been a failure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>I felt fearful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>My sleep was restless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>I was happy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>I talked less than usual</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>I felt lonely</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15.</td>
<td>People were unfriendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16.</td>
<td>I enjoyed life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------</td>
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</tr>
<tr>
<td>17.</td>
<td>I had crying spells</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I felt sad</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19.</td>
<td>I felt that people disliked me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>I could not get “going”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
DEPRESSION ANXIETY STRESS SCALE - 21 (DASS-21)

INSTRUCTIONS:
Please read each statement and choose the option (0, 1, 2 or 3) that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

OVER THE PAST WEEK:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>DID NOT apply to me at all</th>
<th>Applied to me to SOME DEGREE, or SOME OF THE TIME</th>
<th>Applied to me to a CONSIDERABLE DEGREE, or a GOOD PART OF TIME</th>
<th>Applied to me VERY MUCH, or MOST OF THE TIME</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>I found it hard to wind down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>02</td>
<td>I was aware of dryness of my mouth</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>03</td>
<td>I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>04</td>
<td>I tended to over-react to situations</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>05</td>
<td>I experienced trembling (e.g., in the hands)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>06</td>
<td>I felt that I was using a lot of nervous energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>07</td>
<td>I was worried about situations in which I might panic and make a fool of myself</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>08</td>
<td>I found myself getting agitated</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>09</td>
<td>I found it difficult to relax</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>I was intolerant of anything that kept me from getting on with what I was doing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>I felt I was close to panic</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>I felt that I was rather touchy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
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<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I felt scared without any good reason</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
QUALITY OF LIFE PROFILE – (QOLP)

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September 16, 2010

Iara Costa
O.I.S.E.
University of Toronto

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Ted Myerscough
Manager, Quality of Life Research Unit
Department of Occupational Science & Occupational Therapy
University of Toronto
QUALITY OF LIFE PROFILE – (QOLP)

A) IMPORTANCE SCALE

INSTRUCTIONS:

Here are some statements about different areas of your life. Please indicate how IMPORTANT each statement is to you, by selecting the answer that is closer to your opinion.

Please try to answer each question as best you can since that makes your data more useful. ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

<table>
<thead>
<tr>
<th>IMPORTANCE SCALE</th>
<th>Not at all important</th>
<th>Not very important</th>
<th>Somewhat important</th>
<th>Very important</th>
<th>Extremely important</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>My appearance – how I look</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>My exercising and being fit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>My hygiene – caring for myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>My nutrition and the food I eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>My physical health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>My sex life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Accepting the way I am</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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### IMPORTANCE SCALE

**How Important to me is:**

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<th>Somewhat important</th>
<th>Very important</th>
<th>Extremely important</th>
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### SATISFACTION SCALE

**INSTRUCTIONS:**

Here are some statements about different areas of your life. Please indicate **how satisfied** with each statement you are, by circling the answer that is closer to your opinion.

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<th>Not very satisfied</th>
<th>Somewhat satisfied</th>
<th>Very satisfied</th>
<th>Extremely satisfied</th>
<th>Prefer Not to Answer</th>
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<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47.</td>
<td>My vacations and holidays activities</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48.</td>
<td>The visiting and socializing with others I do</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>49.</td>
<td>How I cope with changes in life</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>50.</td>
<td>How I improve my physical skills</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>51.</td>
<td>My learning about new things</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>52.</td>
<td>My resolving conflicts with others</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>53.</td>
<td>My solving of my problems</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54.</td>
<td>My trying out new things</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
C) CONTROL SCALE

INSTRUCTIONS:
Here are some statements about different areas of your life. Please indicate **how much control** you feel that you have over each statement, by circling the answer that is closer to your opinion.

<table>
<thead>
<tr>
<th>CONTROL SCALE</th>
<th>How much control do I have over:</th>
<th>None</th>
<th>A little</th>
<th>Some</th>
<th>Quite a bit</th>
<th>A lot</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My body and my physical health</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. My thoughts and feelings</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. My beliefs and values</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. Where I live and spend my time</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. The people around me</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. My access to things in my community</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. The practical things I do</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. The things I do for fun and enjoyment</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. The things I do to cope and change</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

D) OPPORTUNITY SCALE

INSTRUCTIONS:
Here are some statements about different areas of your life. Please indicate to what degree are there **opportunities for you to improve** each area of your life, by circling the answer that is closer to your opinion.

<table>
<thead>
<tr>
<th>OPPORTUNITY SCALE</th>
<th>To what degree are there opportunities for me to improve:</th>
<th>None</th>
<th>A few</th>
<th>Some</th>
<th>Quite a few</th>
<th>A great many</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My body and my physical health</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>2. My thoughts and feelings</td>
<td></td>
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</tr>
<tr>
<td>3. My beliefs and values</td>
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<td>4. Where I live and spend my time</td>
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</tr>
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<td>5. The people around me</td>
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<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
## OPPORTUNITY SCALE

To what degree are there opportunities for me to improve:

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>A few</th>
<th>Some</th>
<th>Quite a few</th>
<th>A great many</th>
<th>Prefer Not to Answer</th>
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<tbody>
<tr>
<td>7. The practical things I do</td>
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<td>9. The things I do to cope and change</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
**LIFE ORIENTATION TEST - REVISED (LOT-R)**

**INSTRUCTIONS:**
Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

Please try to answer each question as best you can since that makes your data more useful. **ALL RESPONSES WILL BE KEPT CONFIDENTIAL.**

<table>
<thead>
<tr>
<th></th>
<th>I agree a lot</th>
<th>I agree a little</th>
<th>I neither agree nor disagree</th>
<th>I DISagree a little</th>
<th>I DISagree a lot</th>
<th>Prefer Not to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>99</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
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</tr>
<tr>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>4</td>
<td>4</td>
<td>3</td>
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<td>1</td>
<td>0</td>
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<tr>
<td>9</td>
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<tr>
<td>10</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>99</td>
</tr>
</tbody>
</table>
QUESTIONÁRIO DE DADOS DEMOGRÁFICOS

INSTRUÇÕES:
Por favor, responda as questões abaixo da forma mais correta e honesta possível. Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.

1. Qual é o seu gênero?
   - [ ] 1. Masculino
   - [ ] 2. Feminino
   - [ ] 3. Prefiro Não Responder

2. Qual é a sua idade?

3. Atualmente você está...
   - [ ] 1. Em uma união estável
   - [ ] 2. Casado legalmente
   - [ ] 3. Namorando
   - [ ] 4. Solteira/o
   - [ ] 5. Separado/Divorciado(a)
   - [ ] 6. Viúvo(a)
   - [ ] 7. Prefiro Não Responder

4. A sua parceira/O seu parceiro é…
   - [ ] 1. Brasileira/o
   - [ ] 2. Português
   - [ ] 3. Canadense
   - [ ] 4. Latino-americana/o
   - [ ] 5. Não se aplica
   - [ ] 6. Prefiro NãoResponder
   - [ ] 7. Outro – Qual? ________________________________
5. Qual é a sua situação atual no Canadá?

1. Imigrante com documentos (Landed immigrant/Permanent resident)
2. Pedido de refúgio
3. Refugiado
4. Imigrante sem documentos de imigração
5. Cidadão/ã Canadense
6. Visto de trabalho
7. Visto de estudo
8. Visto de visitante

6. Você se considera…

1. Brasileiro de origem Indígena
2. Brasileiro de origem africana
3. Brasileiro de origem européia
4. Brasileiro de origem asiática
5. Brasileiro de origem do oriente médio
6. Latino-americana/o
7. Prefiro não responder
8. Outra – Qual? ______________________________________________________

7. Você se considera…

1. Brasileira/o
2. Canadense
3. Brasileira/ohCanadense
4. Prefiro não responder

8. De qual região do Brasil você é?

1. Norte
2. Nordeste
3. Centro-oeste
4. Sudeste
5. Sul
6. Prefiro não responder
9. Você atualmente mora na Região da Grande Toronto?

1. Não
2. Sim

10. Qual é o nível mais alto de educação que você obteve?

1. Ensino elementar
2. Segundo grau incompleto
3. Segundo grau completo (ou supletivo/GED)
4. Diploma profissionalizante
5. Nível Técnico incompleto
6. Nível Técnico (diploma de 2 anos)
7. Diploma de 4 anos [nível tecnológico ou universidade (Bacharelado)]
8. Mestrado
9. Doutorado
10. Diploma profissional (residência médica, por exemplo)
11. Prefiro não responder

11. Atualmente você está...

1. Estudando
2. Trabalhando (não na minha área profissional)
3. Trabalhando (na minha área profissional)
4. Desempregado
5. Aposentado
6. Mãe/pai/cuidador(a) que fica em casa
7. Prefiro não responder

12. A sua profissão é na área de...

1. Trades (construção, operação de empilhadeira, etc.)
2. Negócios (área administrativa, financeira, etc.)
3. Ciências Sociais
4. Ciências da Saúde
5. Artes e Ciências Humanas
6. Comércio
7. Prefiro não responder
8. Outra – Qual? ________________________________
13. Qual é a sua renda anual atual (em dólar canadense)?

- 1. Menos de $20,000
- 2. $20,000-$39,999
- 3. $40,000-$59,999
- 4. $60,000-$79,999
- 5. $80,000-$99,999
- 6. $100,000 ou mais
- 7. Prefiro não responder

14. Qual é a renda anual atual da sua família (em dólar canadense)?

- 1. Menos de $20,000
- 2. $20,000-$39,999
- 3. $40,000-$59,999
- 4. $60,000-$79,999
- 5. $80,000-$99,999
- 6. $100,000 ou mais
- 7. Prefiro não responder
QUESTIONÁRIO DE CONTEXTO DE IMMIGRAÇÃO

INSTRUÇÕES:
Por favor, responda as questões abaixo da forma mais correta e honesta possível. Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.

1. Há quanto tempo você está no Canadá (em quantidade de anos completos)?
   _________    [ ] Prefiro Não Responder

2. Você nasceu no Brasil?
   [ ] 1. Não
   [ ] 2. Sim

3. Por quanto tempo você morou no Brasil (em quantidade de anos completos)?
   _______

4. Que idade você tinha quando imigrou para o Canadá (em quantidade de anos completos)?
   ______________________

5. Por que você decidiu sair do Brasil?
   [ ] 1. Procurando melhores oportunidades de emprego
   [ ] 2. Procurando segurança
   [ ] 3. Melhores oportunidades para a família
   [ ] 4. Acompanhando pais/cônjuge
   [ ] 5. Procurando aventura
   [ ] 6. Enviado/a a trabalho
   [ ] 7. Razões políticas
   [ ] 8. Forçado/a por outras razões
   [ ] 9. Estudo
   [ ] 10. Razões econômicas
   [ ] 11. Prefiro não responder
   [ ] 12. Outra – Qual? ____________________________________________

6. Por que você escolheu viver no Canadá?
   [ ] 1. Reunir-me com membros da família
   [ ] 2. Acompanhando alguém, portanto, não tive escolha
3. Enviado/a a trabalho, portanto, não tive escolha
4. Gostei da cultura
5. Gostei das pessoas
6. Melhor oportunidades de estudo
7. Melhor oportunidades profissionais/emprego
8. Mais fácil para ganhar dinheiro
9. Mais fácil para conseguir visto/ser aceito/a como imigrante que outros países
10. Prefiro não responder
11. Outra – Qual? _____________________________________________________________

7. Qual era a sua intenção original quando decidiu se mudar para o Canadá?
   1. Ficar por um tempo determinado
   2. Ficar por bastante tempo
   3. Tornar-me cidadã/ão canadense
   4. Sem plano específico
   5. Prefiro não responder
   6. Outra – Qual? _____________________________________________________________

8. Você acha que as expectativas que você tinha antes de se mudar para o Canadá se tornaram, estão se tornando, ou tornar-se-ão realidade?
   1. Nem um pouco
   2. Um pouco
   3. Moderadamente
   4. Muito
   5. Extremamente
   6. Prefiro não responder

9. Qual é a principal língua que você fala em casa?
   1. Português
   2. Inglês
   3. Português e inglês
   4. Prefiro não responder
   5. Outra – Qual? _____________________________________________________________

10. Qual é a principal língua que você fala fora de casa?
   1. Português
   2. Inglês
   3. Português e inglês
4. Prefiro não responder
5. Outra – Qual? ______________________________________________________________

11. Qual é o seu nível de proficiência em PORTUGUÊS?
   1. Iniciante
   2. Intermediário
   3. Avançado
   4. Fluente
   5. Prefiro não responder

12. Qual é o seu nível de proficiência em INGLÊS?
   1. Iniciante
   2. Intermediário
   3. Avançado
   4. Fluente
   5. Prefiro não responder

13. Qual era o seu nível geral de INGLÊS antes de imigrar para o Canadá?
   1. Iniciante
   2. Intermediário
   3. Avançado
   4. Fluente
   5. Prefiro não responder

14. Você tinha um emprego na sua área profissional no Brasil?
   1. Não, mas tinha emprego em outra área
   2. Não, nunca teve um emprego no Brasil
   3. Sim
   4. Prefiro não responder

15. O seu primeiro emprego no Canadá foi…
   1. Na sua área
   2. Em outra área
   3. Ainda não acho um emprego
   4. Até então nunca procurou um emprego
   5. Prefiro não responder

16. Você acha que possui um grupo de amigos ou familiares com o qual você pode contar para suporte?
   1. Não
   2. Sim
   3. Prefiro não responder

17. Se você respondeu ‘SIM’, por favor, indique se a MAIORIA dessas pessoas é…
   1. Brasileira
   2. Portuguesa
3. Canadense
4. Latino-americana
5. Não se aplica
6. Prefiro não responder
7. Outra – Qual? _______________________________

18. ATUALMENTE você usa algum dos serviços disponíveis à comunidade brasileira na Área da Grande Toronto?
1. Não
2. Sim
3. Prefiro não responder

19. De modo geral, você acha que as culturas brasileira e canadense são semelhantes?
1. Nem um pouco
2. Um pouco
3. Moderadamente
4. Muito
5. Extremamente
6. Prefiro não responder

20. Você acha que as culturas brasileira e canadense são compatíveis?
1. Nem um pouco
2. Um pouco
3. Moderadamente
4. Muito
5. Extremamente
6. Prefiro não responder

21. Você se sente bem-vindo no Canadá?
1. Nem um pouco
2. Um pouco
3. Moderadamente
4. Muito
5. Extremamente
6. Prefiro não responder

22. Você está satisfeita/o com a sua vida no Canadá?
1. Nem um pouco
2. Um pouco
3. Moderadamente
4. Muito
5. Extremamente
6. Prefiro não responder

23. Você planeja voltar a viver no Brasil?
1. De jeito nenhum
2. Não sei
3. Sim, com certeza
4. Prefiro não responder
24. Você já foi diagnosticado/a com DEPRESSÃO por um médico, psiquiatra ou psicólogo?

1. Não
2. SIM, no BRASIL
3. SIM, no CANADÁ
4. SIM, tanto no BRASIL como no CANADÁ
5. SIM, em um OUTRO país
6. Prefiro não responder

25. Você já foi diagnosticado/a com ANSIEDADE por um médico, psiquiatra ou psicólogo?

1. Não
2. SIM, no BRASIL
3. SIM, no CANADÁ
4. SIM, tanto no BRASIL como no CANADÁ
5. SIM, em um OUTRO país
6. Prefiro não responder

26. Você já foi diagnosticado/a com ESTRESSE por um médico, psiquiatra ou psicólogo?

1. Não
2. SIM, no BRASIL
3. SIM, no CANADÁ
4. SIM, tanto no BRASIL como no CANADÁ
5. SIM, em um OUTRO país
6. Prefiro não responder

27. Você já consultou um psicólogo/psicoterapeuta/psiquiatra por mais de 3 meses, por causa de problemas emocionais como depressão, ansiedade ou estresse?

1. Não
2. SIM, no BRASIL
3. SIM, no CANADÁ
4. SIM, tanto no BRASIL como no CANADÁ
5. SIM, em um OUTRO país
6. Prefiro não responder
28. Você já foi hospitalizado/a por causa de problemas emocionais como depressão, ansiedade ou estresse?

   1. Não
   2. SIM, no BRASIL
   3. SIM, no CANADÁ
   4. SIM, tanto no BRASIL como no CANADÁ
   5. SIM, em um OUTRO país
   6. Prefiro não responder

29. Você já tomou medicamento para depressão, ansiedade ou estresse?

   1. Não
   2. SIM, no BRASIL
   3. SIM, no CANADÁ
   4. SIM, tanto no BRASIL como no CANADÁ
   5. SIM, em um OUTRO país
   6. Prefiro não responder

30. Você está atualmente tomando medicamento para depressão?

   1. Não
   2. Sim
   3. Prefiro não responder
ESCALA DE ESTRATÉGIAS DE ACULTURAÇÃO

**INSTRUÇÕES:**

Aqui estão algumas afirmações acerca de linguagem, tradições culturais, amigos, etc. Por favor, indique **em que medida concorda ou discorda** com cada afirmação, indicando a resposta que mais se aplica ao seu caso.

Algumas questões podem parecer repetitivas, contudo, cada questão está avaliando algo diferente. Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. **TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.**

*Algumas questões podem lhe parecer repetitivas, contudo, cada uma está medindo algo diferente. Por favor, procure responder todas as questões.*

<table>
<thead>
<tr>
<th></th>
<th>Discor do totalmente</th>
<th>Discor do um pouco</th>
<th>Neutro</th>
<th>Concor do um pouco</th>
<th>Concor do totalmente</th>
<th>Prefiro Não Responder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tenho mais amigos canadenses que amigos brasileiros</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2. Acho que filhos de brasileiros vivendo no Canadá devem aprender tanto valores e costumes brasileiros quanto valores e costumes canadenses</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
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<td>6. Acho que filhos de brasileiros vivendo no Canadá devem aprender valores e costumes brasileiros ao invés de valores e costumes canadenses</td>
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Algumas questões podem lhe parecer repetitivas, contudo, cada uma está medindo algo diferente. Por favor, procure responder todas as questões.

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QUALITY OF LIFE PROFILE – (QOLP)

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---

September 16, 2010

Iara Costa
O.I.S.E.
University of Toronto

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Ted Myerscough
Manager, Quality of Life Research Unit
Department of Occupational Science & Occupational Therapy
University of Toronto
QUALITY OF LIFE PROFILE – (QOLP)

A) ESCALA DE IMPORTÂNCIA

INSTRUÇÕES:

Aqui estão algumas sentenças sobre diferentes áreas da sua vida. Por favor, indique o quanto cada sentença é **IMPORTANTE** para você. Selecione a resposta que mais se aproxima da sua opinião.

Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. **TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.**

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B) ESCALA DE SATISFAÇÃO

**INSTRUÇÕES:**

Aqui estão algumas sentenças sobre diferentes áreas da sua vida. Por favor, indique o quanto você está **SATISfeito/A** com a área abordada em cada sentença. Selecione a resposta que mais se aproxima da sua opinião.
Por favor, tente responder todas as questões da melhor forma possível, para que seus dados
sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO
CONFIDENCIAIS.

<table>
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<tr>
<th>ESCALA DE SATISFACÇÃO</th>
<th>Em que medida estou</th>
<th>Satisfeito/A com:</th>
<th>NADA satisfeito</th>
<th>NÃO MUITO satisfeito</th>
<th>RAZOAVELMENTE satisfeito</th>
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## ESCALA DE SATISFAÇÃO

**Em que medida estou SATISFEITO/A com:**

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<td>43. Os entretenimentos públicos que eu atendo</td>
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<td>5</td>
</tr>
<tr>
<td>44. A minha participação em atividades de lazer (TV, leitura, caminhadas, andar de bicicleta, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>45. O meu envolvimento em esportes organizados ou recreação</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>46. Meus hobbies ou passatempos</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>47. As minhas atividades durante férias e feriados</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>48. As minhas visitas e convívio com outras pessoas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>49. Como eu lido com as mudanças da vida</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50. A maneira como eu melhoro as minha habilidades físicas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51. O meu aprendizado de coisas novas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52. A minha resolução de conflitos com os outros</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53. A minha resolução de meus problemas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54. A minha experimentação de coisas novas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
C) ESCALA DE CONTROLE

INSTRUÇÕES:

Aqui estão algumas sentenças sobre diferentes áreas da sua vida. Por favor, indique em que medida você tem controles sobre a área abordada em cada sentença. Selecione a resposta que mais se aproxima da sua opinião.

Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.

<table>
<thead>
<tr>
<th>ESCALA DE CONTROLE</th>
<th>Nenhum</th>
<th>Um Pouco</th>
<th>Algum</th>
<th>Bastante</th>
<th>Muito</th>
<th>Prefiro Não Responder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meu corpo e minha saúde física</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. Meus pensamentos e sentimentos</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. Minhas crenças e valores</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. Onde eu moro e como passo o meu tempo</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. As pessoas que me rodeiam</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. Meu acesso a coisas na minha comunidade</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. As coisas práticas que eu faço</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. As coisas que eu faço por diversão e prazer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. As coisas que eu faço para enfrentar dificuldades e mudar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
D) ESCALA DE OPORTUNIDADE

INSTRUÇÕES:

Aqui estão algumas sentenças sobre diferentes áreas da sua vida. Por favor, indique em que medida existem **OPORTUNIDADES** para você melhorar cada área da sua vida. Selecione a resposta que mais se aproxima da sua opinião.

Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. **TODAS AS RESPOSTAS PERMANECERÃO CONFIденCIAIS.**

<table>
<thead>
<tr>
<th><strong>ESCALA DE OPORTUNIDADE</strong></th>
<th>Nenhu<strong>ma</strong></th>
<th>Pouças</th>
<th>Algu<strong>mas</strong></th>
<th>Bastan<strong>te</strong></th>
<th>Muitas</th>
<th>Prefiro <strong>Não Responder</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Em que medida existem OPORTUNIDADES para eu melhorar:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Meu corpo e minha saúde física</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Meus pensamentos e sentimentos</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Minhas crenças e valores</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Onde eu moro e como passo o meu tempo</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. As pessoas que me rodeiam</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Meu acesso a coisas na minha comunidade</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. As coisas práticas que eu faço</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. As coisas que eu faço por diversão e prazer</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. As coisas que eu faço para enfrentar dificuldades e mudar</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**CES-D - PROAD/UNIFESP**

**INSTRUÇÕES:**
Segue abaixo uma lista de tipos de sentimentos e comportamentos. Solicitamos que você selecione a frequência com que tenha se sentido desta maneira *durante a semana passada*.

Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.

**DURANTE A ÚLTIMA SEMANA:**

<table>
<thead>
<tr>
<th>Questão</th>
<th><strong>RARAME NTE (menos que 1 dia)</strong></th>
<th><strong>Durante POUCO tempo (1 ou 2 dias)</strong></th>
<th><strong>Durante um tempo MODERADO (3 a 4 dias)</strong></th>
<th><strong>Durante A MAIOR PARTE do tempo (5 a 7 dias)</strong></th>
<th><strong>Prefiro Não Responder</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Senti-me incomodado com coisas que habitualmente não me incomodam</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Não tive vontade de comer; tive pouco apetite</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Senti não conseguir melhorar meu estado de ânimo mesmo com a ajuda de familiares e amigos</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Senti-me, comparando-me às outras pessoas, tendo tanto valor quanto a maioria delas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>Senti dificuldade em me concentrar no que estava fazendo</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>Senti-me deprimido</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Senti que tive que fazer esforço para dar conta das minhas tarefas habituais</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>Senti-me otimista com relação ao futuro</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Considerei que minha vida tinha sido um fracasso</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>Senti-me amedrontado</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>Meu sono não foi repousante</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>Estive feliz</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>Falei menos que o habitual</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>Senti-me sozinho</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15.</td>
<td>As pessoas não foram amistosas comigo</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16.</td>
<td>Aproveitei minha vida</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17.</td>
<td>Tive crises de choro</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Sentença</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>18</td>
<td>Senti-me triste</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Senti que as pessoas não gostavam de mim</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Não consegui levar adiante minhas coisas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**DASS-21**

**INSTRUÇÕES:**
Por favor leia cada uma das afirmações abaixo e selecione a opção que corresponde ao quanto cada afirmação se aplicou a você durante a semana passada. Não há respostas certas ou erradas. Não leve muito tempo a indicar a sua resposta em cada afirmação.

Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.

**DURANTE A SEMANA PASSADA:**

<table>
<thead>
<tr>
<th><strong>01.</strong> Tive dificuldades em me acalmar</th>
<th><strong>02.</strong> Senti a minha boca seca</th>
<th><strong>03.</strong> Senti dificuldades em respirar</th>
<th><strong>04.</strong> Tive tendência a reagir em demasia em determinadas situações</th>
<th><strong>05.</strong> Senti tremores (por ex., nas mãos)</th>
<th><strong>06.</strong> Senti que estava a utilizar muita energia nervosa</th>
<th><strong>07.</strong> Preocupei-me com situações em que podia entrar em pânico e fazer figura ridícula</th>
<th><strong>08.</strong> Dei por mim a ficar agitado</th>
<th><strong>09.</strong> Senti dificuldade em me relaxar</th>
<th><strong>10.</strong> Estive intolerante em relação a qualquer coisa que me impedisse de terminar aquilo que estava a fazer</th>
<th><strong>11.</strong> Senti-me quase a entrar em pânico</th>
<th><strong>12.</strong> Senti que por vezes estava sensível</th>
<th><strong>13.</strong> Senti alterações no meu coração sem fazer exercício físico</th>
<th><strong>14.</strong> Senti-me assustado sem ter tido uma boa razão para isso</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Não se aplicou NADA a mim</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td><strong>aplicou-se a mim ALGUMAS VEZES</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>aplicou-se a mim de MUITAS VEZES</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td><strong>Prefiro Não Responder</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
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<td><strong>4</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.
TESTE DE ORIENTAÇÃO DA VIDA (TOV-R)

**INSTRUÇÕES:**
Seja o(a) mais sincero(a) possível e procure não deixar sua resposta a uma questão influenciar suas respostas às outras questões. Não há respostas certas nem erradas.

Responda as questões abaixo a respeito de você, indicando o seu grau de acordo e não como você pensa que a “maioria” das pessoas responderia.

Por favor, tente responder todas as questões da melhor forma possível, para que seus dados sejam mais úteis para esta pesquisa. TODAS AS RESPOSTAS PERMANECERÃO CONFIDENCIAIS.

<table>
<thead>
<tr>
<th></th>
<th>CONcordo totalmente</th>
<th>CONcordo</th>
<th>Neutr o</th>
<th>DIScordo</th>
<th>DIScordo totalmente</th>
<th>Prefiro Não Responder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Nos momentos de incerteza, geralmente eu espero que aconteça o melhor</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>É fácil para mim relaxar</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Se alguma coisa ruim pode acontecer comigo, vai acontecer</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Eu sou sempre otimista com relação ao meu futuro</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Eu gosto muito da companhia de meus amigos e amigas</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>É importante para mim manter-me em atividade</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Quase nunca eu espero que as coisas funcionem como eu desejaria</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Eu não me zango facilmente</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>Raramente eu espero que coisas boas aconteçam comigo</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>De maneira geral, eu espero que me aconteçam mais coisas boas do que coisas ruins</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Appendix D.
Recruitment Materials – English Version

RECRUITMENT EMAIL

Hello,

My name is Iara Costa. I am a graduate student in the department of Counselling Psychology at the Ontario Institute for Studies in Education of the University of Toronto. I am conducting a study as part of my doctoral studies in counselling psychology.

Through my study I would like to find out more about the lives of Brazilians in Canada, the strategies we use to adapt to Canada, how we feel, and how our quality of life is.

I conducted another study nearly three years ago and received very strong support. That study raised my interested in the themes that I am now inviting you to talk about. Even if you participated in the first survey, you may still participate in the present one.

If you…

- Were born in Brazil
- Lived in Brazil for at least 10 years before coming to Canada
- Are a Canadian citizen, or a permanent resident of Canada (landed immigrant, refugee, refugee claimant), or have no official immigration documents
- Live in the Greater Toronto Area (GTA)
- Are at least 16 years of age
- Speak Portuguese or English

Then you are eligible to participate!

Please note that individuals who have work, student, or visitor visas are NOT eligible to participate.

If you are interested,

1. You will be asked to fill out a few questionnaires that will take approximately one hour.
2. You will be offered $20 for completing the survey, which you may choose to accept, donate to your favourite charity, or decline.
3. Your answers will help us understand more about each other and our community.
4. You may click on this link to fill out the survey online or copy and paste this URL http://fluidsurveys.com/s/brazil/ onto your internet browser.

You are by no means obliged to participate in my study. If you are not interested or do not fit the criteria, please feel free to forward this e-mail to anyone that you think that might be interested in helping. Otherwise, I would be glad to hear from you or receive your online survey!

Feel free to contact me if you have any questions.

Thank you for your time.

Iara Costa
Ph.D. Candidate
OISE – University of Toronto
647-9BRAZIL or 647-927-2945
iara.costa@utoronto.ca
Are you Brazilian??

Would you like to participate in an online survey?

Help us know more about the lives of Brazilians in Canada, how we feel, and how our quality of life is.

To participate you must:

✓ Be at least 16 years of age
✓ Have been born in Brazil
✓ Have lived in Brazil for at least 10 years
✓ Live in the Greater Toronto Area (GTA) without documents, with documents, as a landed immigrant, as a refugee, as a refugee claimant, or as a Canadian citizen

*** (visitor, student or work visas are not eligible to participate, unless the visa has expired)

100% CONFIDENTIAL! $20 for completed survey

For more information contact me, lara Costa, or visit the internet site below.

http://fluidsurveys.com/s/brazil/
TAKE-ONE FLYERS

ADAPTATION AND QUALITY OF LIFE
OF BRAZILIANS IN TORONTO
(Iara Costa = Brazilian and student at University of Toronto)

- Online: http://fluidsurveys.com/s/brazil/
- For more information contact me (Iara):
  416-871-3494 or iara.costa@mail.utoronto.ca

Absolutely CONFIDENTIAL || $20/completed survey
Olá,

Meu nome é Iara Costa. Eu sou brasileira e atualmente estudante do departamento de Aconselhamento Psicológico (Counselling Psychology) no Instituto de Estudos em Educação (Ontario Institute for Studies in Education) na Universidade de Toronto. Eu estou conduzindo um estudo como parte do meu doutorado em aconselhamento psicológico.

Por meio do meu estudo, eu gostaria de aprender mais sobre as vidas dos brasileiros no Canadá, as estratégias que nós usamos para nos adaptarmos ao Canadá, como nos sentimos, e como é a nossa qualidade de vida.

Eu conduzi outro estudo por volta de três anos atrás. Eu recebi um apoio forte da nossa comunidade durante aquele estudo. Aquele estudo despertou o meu interesse nos temas que eu estou agora convidando você a falar a respeito. Mesmo que você tenha participado do primeiro estudo, você ainda pode participar desta nova pesquisa.

Se você...

- Nasceu no Brasil
- Morou no Brasil por pelo menos 10 anos antes de imigrar para o Canadá
- É um/a cidadão/a canadense, ou residente permanente do Canadá (imigrante com documentos, refugiado/a, aguardando pedido de refúgio), ou não tem os seus documentos de imigração
- Mora na Área da Grande Toronto (GTA)
- Tem pelo menos 16 anos de idade
- Fala português ou inglês

Então você pode participar!

**Atenção:** pessoas que tenham visto de trabalho, estudante, or visitante **NÃO** são elegíveis a participar.

Se você está interessado/a,

1. Você será solicitado/a a preencher alguns questionários que levarão por volta de uma hora para responder.
2. Você será oferecido/a $20 por participar da pesquisa, o qual você poderá escolher aceitar, doar para a sua instituição de caridade preferida, or recusar.
3. As suas respostas nos ajudarão a entender melhor uns aos outros e a nossa comunidade.

Vocês não é, de forma alguma, obrigado a participar deste estudo. Se você não está interessado ou não preenche os requisitos para participar, por favor fique à vontade para encaminhar este e-mail para todos aqueles/as que você imagina que possam estar interessados em ajudar. Caso contrário, eu estarei disponível para responder quaisquer perguntas ou receber a suas respostas online!

Fique à vontade para me contatar se você tiver qualquer dúvida.

Obrigada.

Iara Costa
M.A. Ph.D. Student
OISE – University of Toronto
647-9BRAZIL or 647-927-2945
iara.costa@utoronto.ca
RECRUITMENT POSTER

Você é Brasileiro/a??
Você gostaria de participar de uma pesquisa online?

Ajuide-nos a saber mais sobre a vida dos/as brasileiros/as que vivem no Canadá, como nos sentimos, e como é a nossa qualidade de vida.

Para participar você deve:
✓ Ter pelo menos 16 anos de idade
✓ Ter nascido no Brasil
✓ Ter vivido no Brasil por pelo menos 10 anos
✓ Morar na Área da Grande Toronto (GTA) sem documentos, com documentos, como residente permanente, refugiado/a, com pedido de refúgio, ou como cidadão/ã canadense

***(Pessoas com visto de visitante, estudante ou de trabalho não são elegíveis a participar)***

100% CONFIDENCIAL! $20 por completar a pesquisa

Para mais informação entre em contato comigo, lara Costa, ou visite o website

Adaptação de brasileiros/as ao Canadá
https://fluidsurveys.com/s/brasil/
lara.costa@utoronto.ca
416-871-3494

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Adaptação de brasileiros/as ao Canadá
https://fluidsurveys.com/s/brasil/
lara.costa@utoronto.ca
416-871-3494
ADAPTAÇÃO E QUALIDADE DE VIDA DOS BRASILEIROS NA GRANDE TORONTO
(Iara Costa = Brasileira e estudante na Universidade de Toronto)

- Online: http://fluidsurveys.com/s/brazil/
- Para mais informações fale comigo (Iara):
  416-871-3494 ou iara.costa@mail.utoronto.ca

Totalmente CONFIDENCIAL || $20/pesquisa completa
Appendix F.
Additional Research Package Documents: English

INFORMATION LETTER

Dear Potential Participant,

I am a graduate student in the department of Counselling Psychology at the Ontario Institute for Studies in Education of the University of Toronto. I would like to invite you to participate in my study. This study is being completed as a doctoral thesis under the supervision of Dr. Roy Moodley. It is funded by the Social Sciences and Humanities Research Council and its completion will help to fulfill the requirements for my doctoral degree in counselling psychology.

WHAT IS THIS STUDY ABOUT?
I am interested in learning about: a) how satisfied Brazilian immigrants are with their life in Canada, b) what are some of the strategies that they use to live well in Canada; c) how do they feel emotionally, and d) if there is a relationship between any of these circumstances. For example, I would like to study whether a specific way of living in Canada helps people feel better emotionally or be more satisfied with their lives, and vice-versa.

I am looking for individuals who:

- Were born in Brazil
- Have lived in Brazil for at least 10 years before coming to Canada
- Have already become a Canadian citizen, or a permanent resident of Canada (landed immigrant, refugee, refugee claimant), or have no official immigration documents
- Live in the Greater Toronto Area (GTA)
- Are at least 16 years of age
- Speak Portuguese or English

Please note that individuals who have work, student, or visitor visas are NOT eligible to participate.

DO I HAVE TO PARTICIPATE?
Your participation in this research is completely voluntary. The information you provide will remain confidential and no one will know that you participated in this study, as you will be completing the survey anonymously. You can decline to answer any questions and are free to withdraw from this study at any time with no consequence. I will not be collecting IP addresses of those who access the survey. After you submit your answers online, I will no longer be able to delete your answers as I will not be able to locate them among all other answers that have been submitted by other participants. This strategy guarantees that your answers will remain anonymous and confidential.

WHAT WILL I BE ASKED TO DO?
You will be asked to fill out some questionnaires, which should take approximately one hour to complete. Some of the questions relate to demographic information, some to your experiences as an immigrant in Canada, some are about the ways you use to adjust to Canada, some relate to how you are feeling emotionally, and some are about how satisfied you are with your life here in
Canada. All forms and questionnaires are available in Portuguese and English and you can choose the language that is more comfortable for you.

ARE THERE ANY RISKS AND BENEFITS TO PARTICIPATING?
By participating you will be helping us to know more about the mental health, quality of life, and immigration issues that Brazilian individuals face while adapting to Canada.

There are no anticipated risks associated with this study; however, some of the questions might lead you to think about negative emotions or experiences. In the case that any questions raise personal issues that you would like to discuss with a counsellor, a ‘Counselling Resource Sheet’ can be found at the bottom of this letter as well as on the final page of the survey. That page contains a list of counselling resources in the Toronto area, many of which offer services in Portuguese. If you live outside of the Toronto area, these resources can refer you to someone in your area, or you can contact me by email for assistance in finding a resource.

WILL I RECEIVE ANY COMPENSATION FOR COMPLETING THE SURVEY?
Yes. You will be offered $20 for completing the full survey. You will not be entitled to this compensation if you do not complete the full survey. If you were successful at completing the full survey, you will be redirected to a second survey, called ‘Compensation Survey.’ The Compensation Survey is completely separate from the first survey that you completed and it was set up so that you may make your compensation choice detached from the answers that you provided to the main survey.

There are four compensation options available to you: a) cheque; b) PayPal; c) donation to a charity; or d) decline compensation. You will receive more information about the compensation process once you finish the first survey. For now, what is important to keep in mind is that the information that you may choose to enter in the Compensation Survey will not be in any way associated with the first survey. Your answers will remain anonymous and confidential.

WHAT WILL HAPPEN TO THE INFORMATION AFTER I HAVE PARTICIPATED IN THE STUDY?
Your name will not be attached to your survey data and only myself and Dr. Moodley will have access to the survey data. All of the information collected as a result of your participation in this study will remain strictly confidential. The information gathered in this study may appear in future publications and public presentations. The data collected will be destroyed after seven years of their utilization.

If you have any questions about your rights as a participant, you may contact the Research Ethics Review Office by e-mail (ethics.review@utoronto.ca) or phone (416-946-3273), or contact Dean Sharpe at 416-978-5585.

If you would like to participate in this study please read and complete the consent form on the next page.

If you have any questions about this study please feel free to contact:

Iara Costa  
647-9BRAZIL or 647-927-2945  
iara.costa@utoronto.ca

Dr. Roy Moodley  
416-978-0721  
roymoodley@oise.utoronto.ca
COUNSELLING RESOURCE SHEET

If this survey has raised any personal issues that you would like to discuss with a counsellor, here is a list of counselling resources in the Toronto area. If you live outside of the Toronto area, these resources can refer you to someone in your area, or you may contact me by email at iara.costa@utoronto.ca for assistance in finding a resource.

Services available in **English and Portuguese**

1. Portuguese Mental Health & Addictions (services in Portuguese)
   Toronto Western Hospital
   399 Bathurst Street
   East Wing, 9th Floor
   [http://www.uhn.ca/Patients_&_Visitors/getting_to_the_hospital/maps_directions/directions_to_hospitals.asp](http://www.uhn.ca/Patients_&_Visitors/getting_to_the_hospital/maps_directions/directions_to_hospitals.asp)
   416-603-5747

2. COSTI
   North York Centre
   Family and Mental Health Services
   Sheridan Mall, 1700 Wilson Ave, Ste 105, North York
   416-244-7714

3. Yorktown Child and Family Centre
   416-394-2424
   21 Ascot Ave, 1st floor, (Dufferin St-St Clair Ave W)

4. Family Service Association of Toronto
   355 Church Street
   416-595-9618

Services available in **English only**

1. OISE/UT Clinic
   252 Bloor Street West
   416-923-6641, ext. 2585

2. Toronto Institute for Relational Psychotherapy
   1352 Bathurst Street
   416-657-6463

3. The Gestalt Institute of Toronto
   194 Carlton Street
   416-964-9494, ext. 63

Thank you for your participation,

Iara Costa
CONSENT FORM

I understand that I will be participating in a research study examining the relationship between ways in which people adjust to Canada after immigration, how satisfied with their life they are, and how they feel emotionally. I have read the information letter describing the purpose and procedures of this study.

I am aware that to prevent others who may share this computer with me from knowing that I have participated in this survey, I may use one of the following ways to erase my browser history:

- Internet Explorer: Click on “tools,” then “options,” and choose “delete browsing history”.
- Firefox: Click on “preferences,” then “privacy,” then click on “history” and choose “clear browsing history”. On the same page click on “cache” and choose “clear cache now”.
- Safari: Open the “History menu” and choose “Clear History” at the bottom of the pull down menu.

DECLARATION OF INFORMED CONSENT

Please click one of the following:

☐ I have read the above information and I would like to participate in this study.

☐ I do not want to participate in this study and would like to exit this survey.
INFORMATION LETTER - COMPENSATION

Thank you for completing the survey!

You have been redirected to this page because you have completed the full survey and are entitled to receive $20 as an acknowledgement for the time you spent sharing your opinions in this study.

You have four options regarding your compensation. Before I tell you more about them, here is some information to keep in mind:

- This is a secure page, which is not linked in any way to the survey that you just completed.
- It is impossible for the information provided on this page to be linked to your answers to the previous survey. Your answers to the first survey will remain 100% confidential and anonymous!
- You have different options to receive your compensation and you have control over how much information you may feel comfortable providing.
- Any information that you provide here will be immediately destroyed as soon as your compensation is sent to you.

WHAT ARE THE COMPENSATION OPTIONS AVAILABLE TO ME?

1. **Accept the compensation by cheque:** You will be asked to provide your name and address so that a cheque can be mailed to you. You may enter a pseudonym or a nickname instead of your real name. In this case, your cheque will be made payable to ‘cash’ and the envelope containing the cheque will be addressed to the pseudonym or nickname that you provide. It is your responsibility to notify your housemates that any correspondence addressed to the above pseudonym or nickname should be given to you.

2. **Accept the compensation via PayPal:** You will be asked to provide your e-mail address so that a PayPal credit can be sent to you. You may enter or create an e-mail address which does not contain your name (e.g., emailforcompensation@hotmail.com). Whatever e-mail address you enter, it must have a PayPal account associated with it or you will need to create a PayPal account associated with it when you receive the email notifying you that you have been sent money via PayPal.

3. **Accept the compensation as a donation to your preferred charity:** You will need to choose from a list of pre-selected charities that serve the Brazilian community (e.g., St. Christopher House, Brazil-Angola Information Centre, Abrigo Centre, etc.) or will need to provide the name and address of the charity to which you wish to make a donation. If you choose this option, you will not need to provide your personal information and the donation will be made by cheque on behalf of a ‘research participant.’

4. **Decline the compensation:** In this case you will not need to provide your name, address, or e-mail and you will be redirected to one last page where you can choose to receive a summary of the research results and find additional information about services available in the Brazilian community.
WHAT WILL HAPPEN TO THE INFORMATION AFTER I HAVE CHOSEN MY COMPENSATION OPTION?

As I mentioned, all of the information you may choose to provide in order to receive the compensation will remain strictly confidential and will be destroyed immediately after you compensation has been sent to you. It will be impossible to link the information you might provide for compensation to the answer that you gave while completing the first survey.

If you would like to choose one of the compensation forms, please read and complete the consent form on the next page.

If you have any questions about this study or forms of compensation please feel free to contact:

Iara Costa
647-9BRAZIL or 647-927-2945
iara.costa@utoronto.ca

Dr. Roy Moodley
416-978-0721
roymoodley@oise.utoronto.ca
CONSENT FORM - COMPENSATION

I understand what my compensation options are and that I may need to provide some information in order to receive my compensation. I also understand how the information that I may provide will be handled. I have read the information letter describing the details about the compensation process.

I am aware that to prevent others who may share this computer with me from knowing that I have participated in this survey, I may use one of the following ways to erase my browser history:

- **Internet Explorer**: Click on “tools,” then “options,” and choose “delete browsing history”.
- **Firefox**: Click on “preferences,” then “privacy,” then click on “history” and choose “clear browsing history”. On the same page click on “cache” and choose “clear cache now”.
- **Safari**: Open the “History menu” and choose “Clear History” at the bottom of the pull down menu.

**DECLARATION OF INFORMED CONSENT**

Please click one of the following:

- [ ] I have read the above information and I accept the compensation by cheque.
  
  Name*:  
  Mailing Address:  
  
  *I understand that I may enter a pseudonym or a nickname instead of my real name. In this case, my cheque will be made payable to ‘cash’ and the envelope containing the cheque will be addressed to the pseudonym or nickname that I provide. I understand that it is my responsibility to notify my housemates that any correspondence addressed to the above pseudonym or nickname should be given to me.

- [ ] I have read the above information and I accept the compensation by PayPal.
  
  E-mail address*:  
  
  * I understand that I may enter an e-mail address which does not contain my name (e.g., emailforcompensation@hotmail.com). Whatever e-mail address I enter must be associated with an existing PayPal account or I will use it to create a PayPal account so that I can receive my compensation.

- [ ] I have read the above information and I would like that my compensation be donated to the following charity:
  
  - [ ] St. Christopher House
  - [ ] Brasil-Angola Information Centre
  - [ ] Abrigo Centre
  - [ ] Other: Charity Name _____________________________________________
  
  Charity Mailing Address _____________________________________________

- [ ] I have read the above information and I decline the compensation offered.
  
  (No further information is required)
SUMMARY OF THE RESULTS SURVEY

I understand that I have the option to receive a summary of the research results.

In order to receive the summary, I will need to enter my e-mail address on this survey, which is completely dissociated from the main survey. This guarantees that my participation will remain anonymous and confidential and that my e-mail address will not be associated with my answers to the previous survey.

Please click one of the following:

☐ I would like to receive a summary of the results of this study.
   E-mail address: ________________________________

☐ I do not want to receive a summary of the results of this study and would like to exit this survey.
   (No further information is necessary)
Appendix G.
Additional Research Package Documents: Portuguese

CARTA INFORMATIVA

Caro Possível Participante,

Eu sou uma estudante de mestrado no departamento de Aconselhamento Psicológico no Instituto de Estudos em Educação da Universidade de Toronto (Department of Counselling Psychology at the Ontario Institute for Studies in Education of the University of Toronto). Eu gostaria de lhe convidar a participar do meu estudo. Esse estudo é a minha pesquisa de doutorado e está sendo conduzido sob a supervisão do Dr. Roy Moodley. A minha pesquisa está sendo financiada pelo Social Sciences and Humanities Research Council e é parte dos requisitos para eu obter o meu diploma de doutorado em psicologia e aconselhamento.

SOBRE O QUE É ESSE ESTUDO?
Eu estou interessada em saber mais sobre: a) o quanto imigrantes brasileiros estão satisfeitos com a sua vida no Canadá; b) quais são as estratégias que eles(as) utilizam para viver bem no Canadá; c) como eles se sentem emocionalmente; e d) se existe uma relação entre estas circunstâncias. Por exemplo, eu gostaria de estudar se existe um jeito específico de viver no Canada que ajuda as pessoas a se sentirem melhor emocionalmente ou se sentirem mais satisfeitas com a vida delas e vice-versa.

Eu estou buscando pessoas que:
- Tenham nascido no Brasil
- Tenham vivido no Brasil por pelo menos 10 anos antes de vir para o Canadá.
- Tenham se tornado cidadãos canadenses, ou sejam residentes permanentes no Canadá (imigrante com documentos, refugiado/a, aguardando pedido de refúgio), ou pessoas não tenham os seus documentos de imigração
- Vivam na Área da Grande Toronto (GTA)
- Tenham pelo menos 16 anos de idade
- Falem português ou inglês

Atenção: pessoas que tenham visto de trabalho, estudante, ou visitante NÃO são elegíveis a participar.

EU TENHO QUE PARTICIPAR?
A sua participação é totalmente voluntária. A informação que você fornecer permanecerá confidencial e ninguém saberá que você participou desse estudo, uma vez que você responderá a pesquisa anonimamente. Você pode se recusar a responder qualquer questão e é livre para deixar o estudo a qualquer momento sem nenhuma consequência. Eu não estarei coletando endereço de IP daquelas pessoas que acessarem a pesquisa. Depois que você submeteu as suas respostas online, eu não poderei deletá-las porque eu não conseguirei localizá-las em meio a todas as outras respostas que foram submetidas por outros participantes. Esta estratégia garante que as suas respostas permanecerão anônimas e confidenciais.

O QUE EU SEREI SOLICITADO A FAZER?
Você sera solicitado/a a preencher alguns questionários que demorarão aproximadamente uma hora para completar. Algumas questões referem-se a dados demográficos, algumas dizem respeito a suas experiências como imigrante no Canadá, algumas são sobre o jeito que você usa
para se adaptar ao Canadá, outras dizem respeito a como você está se sentindo emocionalmente, e algumas se referem ao quão satisfeito/a você está com a sua vida no Canadá. Todos os questionários estão disponíveis em português e inglês e você pode escolher a língua com a qual você se sente mais confortável.

EXISTEM RISCOS E BENEFÍCIOS SE EU PARTICIPAR?
Em participando deste estudo, você estará nos ajudando a saber mais a respeito da saúde mental, qualidade de vida e assuntos de imigração que brasileiros/as enfrentam no processo de adaptação ao Canadá.

Não foi previsto nenhum risco associado a esse estudo; contudo, algumas questões podem levar você a pensar sobre emoções ou experiências negativas. Caso algumas questões despertem assuntos pessoais que você gostaria de discutir com um conselheiro/terapeuta, uma lista intitulada ‘Agências de Aconselhamento’ foi incluída no final dessa carta e também na última página desta pesquisa. Essa lista contém uma série de instituições que oferecem aconselhamento e terapia em Toronto. Várias delas oferecem serviços em português.

EU RECEBEREI ALGUMA COMPENSAÇÃO POR TER COMPLETADO A PESQUISA?
Sim. Você será oferecido/a $20 por ter respondido toda a pesquisa. Você não será elegível a receber esta compensação se você não completar todas as perguntas da pesquisa. Se você completar toda a pesquisa, você será redirecionado/a a uma segunda pesquisa chamada ‘Pesquisa de Compensação.’ A Pesquisa de Compensação é totalmente separada da primeira pesquisa que você completou e foi configurada de forma que você seleccionará o meio de compensação de uma maneira completamente dissociada das respostas que você forneceu na primeira pesquisa.

Há quatro formas de compensação disponíveis para você escolher: a) cheque; b) PayPal; c) doação para uma caridade ou instituição sem fins lucrativos; ou d) recusar a compensação. Você receberá mais informação sobre o processo de compensação uma vez que você terminar de responder toda a primeira pesquisa. Por agora, o que é importante se lembrar é que a informação que você decidir incluir na Pesquisa de Compensação não será de forma alguma associada com a primeira pesquisa. As suas respostas permanecerão anônimas e confidenciais.

O QUE ACONTECERÁ COM A INFORMAÇÃO DEPOIS DE EU TER PARTICIPADO DO ESTUDO?
O seu nome não será vinculado às suas repostas e apenas eu e o Dr. Moodley teremos acesso aos dados da pesquisa. Toda informação coletada por meio da sua participação neste estudo permanecerá estritamente confidencial. A informação coletada neste estudo poderá aparecer em futuras publicações e apresentações públicas. Os dados coletados serão destruídos depois de sete anos da sua utilização.

Se você tiver qualquer dúvida sobre os seus direitos de participante, você poderá contatar o escritório de Revisão de Ética em Pesquisa via e-mail (ethics.review@utoronto.ca) ou telefone (416-946-3273), ou contatar Dean Sharpe no número 416-978-5585.

Se você desejar participar deste estudo, por favor, leia e preencha o Formulário de Consentimento na próxima página.

Se você tiver qualquer dúvida sobre este estudo, por favor, sinta-se à vontade para contatar:

Iara Costa
647-9BRAZIL (647-927-2945)  
iara.costa@utoronto.ca

Dr. Roy Moodley (Inglês apenas)
416-978-0721  
roymoodley@oise.utoronto.ca
AGÊNCIAS DE ACONSELHAMENTO

Se esta pesquisa despertou assuntos pessoais que você gostaria de discutir com um conselheiro/terapeuta, aqui está uma lista de instituições que oferecem aconselhamento e terapia em Toronto. Por favor, sintase à vontade para me contatar por telefone no número 647-9BRAZIL (647-927-2945) ou pelo email iara.costa@utoronto.ca se você precisar de ajuda para achar um serviço.

Serviços disponíveis em inglês e português

1. Portuguese Mental Health & Addictions
   Toronto Western Hospital
   399 Bathurst Street
   East Wing, 9th Floor
   416-603-5747

2. COSTI
   North York Centre
   Family and Mental Health Services
   Sheridan Mall, 1700 Wilson Ave, Ste 105, North York
   416-244-7714

3. Yorktown Child and Family Centre
   416-394-2424
   21 Ascot Ave, 1st Fl, (Dufferin St-St Clair Ave W)

4. Family Service Association of Toronto
   355 Church Street
   416-595-9618

Serviços disponíveis apenas em inglês

1. OISE/UT Clinic
   252 Bloor Street West
   416-923-6641, ext. 2585

2. Toronto Institute for Relational Psychotherapy
   1352 Bathurst Street
   416-657-6463

3. The Gestalt Institute of Toronto
   194 Carlton Street
   416-964-9494, ext. 63
FORMULÁRIO DE CONSENTIMENTO INFORMADO

Eu entendo que eu estarei participando em uma pesquisa que examinará o relacionamento entre as formas pelas quais as pessoas se adaptam ao Canadá depois de imigrarem, o quanto elas estão satisfeitas com a vida delas, e como elas se sentem emocionalmente. Eu li a carta informativa descrevendo os objetivos e procedimentos desta pesquisa.

Eu entendo que para prevenir que outras pessoas que compartilham este computador comigo venham a saber que eu participei desta pesquisa, eu posso usar uma das seguintes formas para apagar a minha história de navegação:

- **Internet Explorer**: Selecione “tools” (“ferramentas”) → “internet options” (“opções de internet”) → “delete browsing history” (“deletar histórico de navegação”).

- **Firefox**: Selecione “preferences” (preferências) → “privacy” (privacidade) → selecione “history” (história) → “clear browsing history” (“deletar histórico de navegação”). Na mesma página selecione “cache” → “clear cache now” (“limpar cache agora”).

- **Safari**: Abra “History menu” → “Clear History” no fim do pull down menu.

DECLARAÇÃO DE CONSENTIMENTO INFORMADO

Por favor, selecione uma das seguintes opções:

- [ ] Eu li a informação acima e gostaria de participar deste estudo.

- [ ] Eu não gostaria de participar deste estudo e gostaria de sair desta pesquisa.
CARTA INFORMATIVA – COMPENSAÇÃO

Obrigada por completar a pesquisa!

Você foi redirecionado/a a esta página porque você completou a pesquisa inteira e tem direito de receber $20 em reconhecimento pelo tempo que você dedicou compartilhando as suas opiniões neste estudo.

Você tem quatro opções de compensação. Antes de lhe falar mais sobre elas, aqui estão alguns pontos para se lembrar:

- Está página é segura; não está ligada de forma alguma à pesquisa que você acabou de responder.
- É impossível associar a informação fornecida nesta página com as as respostas que você forneceu para a primeira pesquisa. As respostas que você forneceu para a primeira pesquisa permanecerão 100% confidenciais e anônimas!
- Você têm opções diferentes para receber a sua compensação e você tem o controle sobre o quanto de informação você se sente bem em fornecer.
- Qualquer informação que você fornecer aqui será imediatamente destruída assim que a sua compensação for enviada a você.

QUAIS SÃO AS OPÇÕES DISPONÍVEIS PARA MIM?

1. **Aceitar a compensação por meio de cheque:** Você será solicitado/a a fornecer o seu nome e endereço para que um cheque possa ser enviado a você. Você poderá fornecer um pseudônimo ou um apelido ao invés de seu nome verdadeiro. Neste caso, o seu cheque será feito em nome de ‘cash’ e o envelope no qual o cheque será enviado será endereçado ao pseudônimo ou apelido que você fornece. É responsabilidade sua alertar as pessoas que moram com você que qualquer correspondência endereçada ao pseudônimo ou apelido fornecido acima seja entregue a você.

2. **Aceitar a compensação por meio de conta PayPal:** Você será solicitado/a a fornecer o seu endereço de e-mail para que um crédito por meio de PayPal possa ser enviado a você. Você poderá usar um e-mail ou criar um novo e-mail que não contenha o seu nome (por exemplo: emailparacompensacao@hotmail.com). Qualquer que seja o endereço de e-mail que você fornecer, este deverá estar associado a uma conta PayPal. Caso contrário, você deverá criar uma conta PayPal associada com o mesmo quando você receber o e-mail de notificação informando que dinheiro via PayPal foi enviado a você.

3. **Aceitar a compensação por meio de doação a sua instituição de caridade preferida:** Você será solicitado/a a escolher entre uma lista de caridades pré-selecionadas que assistem a comunidade brasileira (por exemplo: Casa São Cristóvão || St. Christopher House; Centro de Informação Brasil-Angola || Brasil-Angola Information Centre; Centro Abrigo || Abrigo Centre, etc.) ou você precisará fornecer o nome e o endereço de alguma outra instituição de Caridade para a qual você deseja fazer a doação. Se você escolher esta opção, você não precisará fornecer nenhum dado pessoal e a doação será feita por meio de cheque em nome de um ‘participante da pesquisa.’
4. **Recusar a compensação:** Neste caso você não precisará fornecer nenhum dado pessoal como nome, endereço, ou e-mail e você será redirecionado à última página da pesquisa aonde você poderá solicitar um resumo dos resultados da pesquisa e aonde você encontrará mais informação sobre serviços disponíveis na comunidade brasileira.

**O QUE ACONTECERÁ COM A INFORMAÇÃO DEPOIS QUE EU ESCOLHER A MINHA FORMA DE COMPENSAÇÃO?**

Como eu mencionei, toda a informação que você decidir fornecer para que seja possível você receber a sua compensação, permanecerá estritamente confidencial e será destruída imediatamente após a sua compensação for enviada a você. Será impossível associar a informação que você fornecer para fins de compensação com as respostas que você forneceu durante a primeira pesquisa.

Se você desejar escolher uma das formas de compensação, por favor leia e complete o formulário de consentimento na próxima página.

Se você tem quaisquer questões sobre este estudo ou formas de compensação, por favor, fique à vontade para contatar:

Iara Costa  
647-9BRAZIL (647-927-2945)  
iara.costa@utoronto.ca

Dr. Roy Moodley  
416-978-0721  
roymoodley@oise.utoronto.ca
CONSENTIMENTO INFORMADO – COMPENSAÇÃO

Eu entendo quais são as minhas opções de compensação e entendo que talvez eu precise fornecer alguma informação para que eu possa receber a minha compensação. Eu também entendo como a informação que eu fornecerei será utilizada. Eu li a carta de informação descrevendo os detalhes sobre o processo de compensação.

Eu entendo que para prevenir que outras pessoas que compartilham este computador comigo saibam que eu participei desta pesquisa, eu posso usar uma das seguintes formas para apagar a minha história de navegação:

- **Internet Explorer**: Selecione “tools” (“ferramentas”) → “internet options” (“opções de internet”) → “delete browsing history” (“deletar histórico de navegação”).

- **Firefox**: Selecione “preferences” (preferências) → “privacy” (privacidade) → selecione “history” (história) → “clear browsing history” (“deletar histórico de navegação”). Na mesma página selecione “cache” → “clear cache now” (“limpar cache agora”).

- **Safari**: Abra “History menu” → “Clear History” no fim do pull down menu.

**DECLARAÇÃO DE CONSENTIMENTO INFORMADO**

Por favor, selecione uma das seguintes opções:

☐ Eu li a informação acima e eu aceito receber a minha compensação por meio de **cheque** de acordo com a informação a seguir:

Nome, pseudônimo ou apelido *:

Endereço p/ correspondência:

*Eu entendo que eu posso usar um pseudônimo ou um apelido ao invés do meu nome verdadeiro. Neste caso, o meu cheque será feito em nome de ‘cash’ e o envelope no qual o cheque será enviado será endereçado ao pseudônimo que eu fornecer. Eu entendo que é minha responsabilidade notificar as pessoas que moram comigo de que qualquer correspondência endereçada ao pseudônimo ou apelido acima deverá ser entregue a mim.

☐ Eu li a informação acima e eu aceito receber a minha compensação por meio de **PayPal** de acordo com a informação a seguir:

Endereço de e-mail*:

* Eu entendo que eu posso usar um endereço de e-mail que não contenha o meu nome (por exemplo: emailparacompensacao@hotmail.com). Qualquer que seja o endereço de e-mail que eu fornecer, este terá que ser associado a uma conta existente de PayPal. Caso contrário eu utilizarei este e-mail para criar uma conta PayPal para que dessa forma eu possa receber a minha compensação.
□ Eu li a informação acima e eu gostaria que a minha compensação seja doada para a seguinte caridade:
□ Casa São Cristóvão || St. Christopher House
□ Centro de Informação Brasil-Angola || Brasil-Angola Information Centre
□ Centro Abrigo || Abrigo Centre
□ Outra: Nome da Instituição de Caridade ____________________________________

Endereço de Correspondência da Instituição de Caridade

__________________________________________________________________________

□ Eu li a informação acima e decidi recusar a compensação oferecida.
(Não preciso fornecer nenhuma informação adicional)
PEDIDO DE SUMÁRIO DA PESQUISA

Eu entendo que eu tenho a opção de receber um resumo dos resultados da pesquisa.

Para receber o resumo, eu precisarei fornecer o meu endereço de e-mail nesta página, a qual é completamente dissociada da pesquisa principal. Isto garante que a minha participação permanecerá anônima e confidencial e que o meu endereço de e-mail não será associado com as respostas que forneci durante a primeira pesquisa.

Por favor selecione uma das seguintes opções:

☐ Eu gostaria de receber um resumo dos resultados desta pesquisa.
   Endereço de e-mail: ____________________________________________

☐ Eu não gostaria de receber um resumo dos resultados desta pesquisa e gostaria de sair desta página.
   (Nenhuma outra informação é necessária)
### Appendix H.
Characteristics of the Four Acculturation Profiles

**Table H1**  
*Demographic Characteristics of The Four Acculturation Profiles*

<table>
<thead>
<tr>
<th>Demographic Variables&lt;sup&gt;a, b&lt;/sup&gt;</th>
<th>Clusters (n, %)&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Marginalized (n = 38)</th>
<th>Integrated (n = 61)</th>
<th>Separated (n = 28)</th>
<th>Assimilated (n = 53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (median)</td>
<td></td>
<td>33</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Time in Canada (median)</td>
<td></td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Immigration Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented</td>
<td></td>
<td>35, 92.1%</td>
<td>52, 85.2%</td>
<td>26, 92.9%</td>
<td>51, 96.2%</td>
</tr>
<tr>
<td>Undocumented</td>
<td></td>
<td>3, 7.9%</td>
<td>9, 14.8%</td>
<td>2, 7.1%</td>
<td>2, 3.8%</td>
</tr>
<tr>
<td>Education (&lt;i&gt;n = 179&lt;/i&gt;)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td></td>
<td>22, 59.5%</td>
<td>34, 55.7%</td>
<td>11, 39.3%</td>
<td>33, 62.3%</td>
</tr>
<tr>
<td>Graduate</td>
<td></td>
<td>6, 16.2%</td>
<td>9, 14.8%</td>
<td>8, 28.6%</td>
<td>13, 24.5%</td>
</tr>
<tr>
<td>Individual Income (&lt;i&gt;n = 154&lt;/i&gt;)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; $20,000</td>
<td></td>
<td>9, 32.1%</td>
<td>22, 42.3%</td>
<td>11, 42.3%</td>
<td>15, 31.3%</td>
</tr>
<tr>
<td>$20,000-$39,999</td>
<td></td>
<td>8, 28.6%</td>
<td>8, 15.4%</td>
<td>8, 30.8%</td>
<td>11, 22.9%</td>
</tr>
<tr>
<td>Household Income (&lt;i&gt;n = 165&lt;/i&gt;)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$40,000-$59,999</td>
<td></td>
<td>12, 40.0%</td>
<td>18, 32.1%</td>
<td>4, 15.4%</td>
<td>12, 22.6%</td>
</tr>
<tr>
<td>≥ $100,000</td>
<td></td>
<td>5, 16.7%</td>
<td>9, 16.1%</td>
<td>8, 30.8%</td>
<td>14, 26.4%</td>
</tr>
</tbody>
</table>

*Note.*<sup>a</sup> Top two responses in total sample, when applicable. <sup>b</sup> n = 180, unless otherwise specified. <sup>c</sup> Valid percentage based on cluster n.
<table>
<thead>
<tr>
<th>Pre-immigration characteristics(^{a,b})</th>
<th>Clusters (n, %)(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginalized (n = 38)</td>
</tr>
<tr>
<td>Reason to Leave Brazil (n = 179)</td>
<td></td>
</tr>
<tr>
<td>quality of life</td>
<td>22, 59.5%</td>
</tr>
<tr>
<td>Not a Choice</td>
<td>11, 29.7%</td>
</tr>
<tr>
<td>Reason to Choose Canada (n = 177)</td>
<td></td>
</tr>
<tr>
<td>quality of life</td>
<td>9, 25.7%</td>
</tr>
<tr>
<td>Easier to obtain visa/be accepted as immigrant</td>
<td>5, 14.3%</td>
</tr>
<tr>
<td>Liked Canadian Culture/People</td>
<td>5, 14.3%</td>
</tr>
<tr>
<td>Intention prior to immigration (n = 178)</td>
<td></td>
</tr>
<tr>
<td>Become a Canadian Citizen</td>
<td>15, 41.7%</td>
</tr>
<tr>
<td>Stay for a limited time</td>
<td>9, 25.0%</td>
</tr>
</tbody>
</table>

\(^a\) Top two responses in total sample, when applicable. \(^b\) n = 180, unless otherwise specified. \(^c\) Valid percentage based on cluster n.
Table H3
*Cultural Identification Characteristics of The Four Acculturation Profiles*

<table>
<thead>
<tr>
<th>Cultural Identification Variables(^{a, b})</th>
<th>Clusters (n, %)(^{c})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginalized (n = 38)</td>
</tr>
<tr>
<td><strong>Cultural identification</strong></td>
<td></td>
</tr>
<tr>
<td>Brazilian</td>
<td>22, 57.9%</td>
</tr>
<tr>
<td>Bra-Can</td>
<td>1, 2.6%</td>
</tr>
<tr>
<td>Canadian</td>
<td>15, 39.5%</td>
</tr>
<tr>
<td><strong>Nationality of romantic partners (n = 177)</strong></td>
<td></td>
</tr>
<tr>
<td>Brazilian</td>
<td>27, 73.0%</td>
</tr>
<tr>
<td>Canadian</td>
<td>3, 8.1%</td>
</tr>
<tr>
<td><strong>Nationality of support network (n = 166)</strong></td>
<td></td>
</tr>
<tr>
<td>Brazilian</td>
<td>23, 79.3%</td>
</tr>
<tr>
<td>Canadian</td>
<td>2, 6.9%</td>
</tr>
<tr>
<td><strong>English Proficiency</strong></td>
<td></td>
</tr>
<tr>
<td>Advanced</td>
<td>13, 34.2%</td>
</tr>
<tr>
<td>Fluent</td>
<td>17, 44.7%</td>
</tr>
<tr>
<td><strong>Language usage at home</strong></td>
<td></td>
</tr>
<tr>
<td>Portuguese</td>
<td>27, 71.1%</td>
</tr>
<tr>
<td>Portuguese and English</td>
<td>8, 21.1%</td>
</tr>
<tr>
<td><strong>Language usage outside the home</strong></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>24, 63.2%</td>
</tr>
<tr>
<td>Portuguese and English</td>
<td>10, 26.3%</td>
</tr>
</tbody>
</table>

*Note.* \(^a\) Top two responses in total sample, when applicable. \(^b\) n = 180, unless otherwise specified. \(^c\) Valid percentage based on cluster n.
### Table H4  
*Attitude Toward Life in Canada per Acculturation Profile*

<table>
<thead>
<tr>
<th>Attitude Toward Life in Canada&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Clusters (n, %)&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginalized (n = 38)</td>
</tr>
<tr>
<td>Culture alikeness (n = 178)</td>
<td></td>
</tr>
<tr>
<td>Not alike</td>
<td>29, 78.4%</td>
</tr>
<tr>
<td>Alike</td>
<td>8, 21.6%</td>
</tr>
<tr>
<td>Culture Compatibility (n = 177)</td>
<td></td>
</tr>
<tr>
<td>Not compatible</td>
<td>20, 54.1%</td>
</tr>
<tr>
<td>Compatible</td>
<td>17, 45.9%</td>
</tr>
<tr>
<td>Welcome in Canada</td>
<td></td>
</tr>
<tr>
<td>Not welcome</td>
<td>2, 5.3%</td>
</tr>
<tr>
<td>Welcome</td>
<td>36, 94.7%</td>
</tr>
<tr>
<td>Plans to Return to Brazil (n = 179)</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>11, 28.9%</td>
</tr>
<tr>
<td>Unsure</td>
<td>22, 57.9%</td>
</tr>
<tr>
<td>Yes, definitely</td>
<td>5, 13.2%</td>
</tr>
</tbody>
</table>

<sup>a</sup> n = 180, unless otherwise specified.  
<sup>b</sup> Valid percentage based on cluster n.

*Note.* Variables rated on a five-point Likert scale had their ratings dichotomized into ‘no’ and ‘yes’ categories. For example, ‘not at all’ and ‘a little bit alike’ were transformed into ‘not alike,’ while responses ranging from ‘somewhat’ to ‘very much alike’ were transformed into ‘alike.’ The ratings of the variable ‘Plans to return to Brazil’ remained unchanged.