Acculturation as a Predictor of Depressive Symptoms and Life Satisfaction among Older Iranian Immigrants in Canada

by

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Abstract

Limited acculturation of older ethnic immigrants in Canada may adversely impact their psychological well-being. When older adults are equipped with effective means of communication and are familiarized with the services and resources of their host country, they can expand their networks to foster service use and buffer them against isolation. As the existing literature suggests, there could be an association between health behaviour and acculturation. For this thesis, it was hypothesized that less acculturated Iranian-born older adults in Canada experience reduced psychological well-being. Demographic characteristics of this population also may account for variability in both acculturation and indicators of mental health; these were also examined as predictors of psychological well-being in the thesis (N = 107). The results of this thesis indicated that acculturation predicts life satisfaction but not depressive symptoms among older Iranian immigrants residing in Metro Vancouver.

Keywords: Acculturation, Depressive Symptoms, Satisfaction with Life, Iranian Older Immigrants, Canada

Dedication

To All the Iranian Seniors in Vancouver who participated in this Study

And

To my Parents

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Chapter 1: Introduction

Immigrants to Canada constitute a large and growing percentage of the population. According to Statistics Canada (2006), more than 6 million people, or close to 20% of the Canadian population, were born abroad. While immigration impacts life in various ways, one significant aspect of immigration is acculturation.

In recent years, acculturation and assimilation of immigrants have been the subject of growing research attention. The growing flow of immigrants and refugees around the globe has substantially contributed to this increase (Schwartz et al., 2010).

According to Berry (1989), acculturation is the process by which individuals change, both by being influenced by contact with other cultures, and by general acculturation changes under way in their own culture (Chang, Tracey, & Moore, 2005). Assimilation within a host culture is reflected in the use of host language, friendship patterns, knowledge of appropriate behaviours in different contexts, and the use of media (Berry, 2002; Jang, Kim, & Chiriboga, 2005).

Acculturation is, in fact, a long lasting process which affects identity, attitudes, values, beliefs and political, physical and economical adjustment. This process is influenced by a variety of factors including education, language, employment, age, sex, motivation, cognitive style and personality (Berry & Kim, 1988; Greenland & Brown, 2005; Lai & Leonenko, 2007). Acculturation is a complex phenomenon and is not merely the outcome of contact between cultural groups; many environmental, individual and social conditions exist that can determine the strategies available for individuals and groups to accommodate. For example, it is believed that acculturation is more difficult for those who must cope with the stigma of being visibly different because of skin colour, language, ethnicity and so forth (Padilla & Perez, 2003).

Although from a broader viewpoint, acculturation can result from any kind of contact between dissimilar cultures, it is usually studied among those living in countries and regions other than their countries of birth; namely immigrants and refugees. One example of cultural dissimilarity between immigrants and Western host nations is the concept of collectivism (valuing family, clan, nation and religion) among Asian/Latino/ Middle-Eastern immigrants, versus individualism (valuing the needs of the individual) in North American host societies (Schwartz et al., 2010). It is important to see how these values change and their consequences.

Old age is considered an overlooked factor in the process of immigration and adjustment to a new culture (McConatha, Stoller, & Oboudiat, 2001). Older immigrants may have specific characteristics which differentiate them from younger age groups in terms of adjustment to a new culture. As a result, adjustment difficulties are likely more stressful in later adulthood (McConatha, et al., 2001; Searle & Ward, 1990); moreover, older adults may assimilate to the new culture more slowly, not only because of their extended exposure to the values and norms of their cultures of origin, but also because of slowed processing speed which may hinder adjustment (Yamada et al., 2006).

The cultural diversity among older immigrants and their level of acculturation impact the ways in which they feel and express themselves in accord with their cultural orientation (Jang, Kim & Chiriboga, 2005). Noticeably, a growing literature indicates that less acculturated immigrants are less likely to use available health services. This may have significant implications for health policy and practice in immigration-rich countries such as Canada.

According to Statistics Canada (2006), immigrants represent a large proportion of the older adult population; in 2001, 29% of individuals aged 65 to 74 and 28% of those aged 75 to 84 were born abroad. It is important to note that Canada is among the nations which allow its immigrants to sponsor family members (including parents and grandparents) to become permanent residents (Citizenship and Immigration Canada, 2009). In 2008, Iran was ranked as

ninth among countries from which immigrants to Canada came; this ranking has not changed since 2000 (Statistics Canada, 2009).

Newcomers to Canada are most likely to reside in large urban areas such as Toronto or Vancouver (Statistic Canada, 2006); these two major cities have the largest numbers of Iranian immigrants. While Vancouver is the second largest destination for Iranian Immigrants with a population estimated to be about 27,000 (Statistics Canada, 2006); the number of older adults of Persian (Iranian) origin was estimated to be more than 2,000 in 2008 (Fact Book on Aging in BC, 2009).The Iranian community is among the largest and fastest-growing Middle-Eastern immigrant communities in Metro Vancouver (Poureslami, Rootman, & Belka, 2007).

Among the issues that senior immigrants may encounter when they settle in Canada are language barriers, housing affordability and availability. Recent immigrants may also be unaware of available social services. As noted by Gelfand (2003), ethnic elderly if involved with their ethnic culture may have some knowledge of ethnically-based services, but most remain unaware of other public programs. In recent years, a growing awareness among mental health professionals regarding the risk of significant psychological distress among immigrants has emerged (Shim & Schwartz, 2008). Some studies have focused on the effect and patterns of acculturation specific to older adults. Given variability across cultures, each ethnic group has a specific pattern of adaptation to the dominant culture; these differences may be more pronounced among older age groups.

Similar to other older ethnic minorities, several factors including duration of residency, employment status, education, health and family context affect elderly Iranian immigrants (Shakeri-Shemirani & O'Connor, 2006). Historical events in the country of origin may also distinguish subgroups of immigrants. For example, the Islamic Revolution of 1979 and the Iran-Iraq War in 1980-1988 both precipitated an influx of Iranian immigrants to North America. These historical factors may have created particular cohorts within different age groups of Iranian

immigrants. Also, whether the decision to emigrate was forced (e.g., due to war or political persecution) or volitional (e.g., seeking enhanced economic security) may affect the process of acculturation and the speed of assimilation.

Iranian immigrants have rarely been the subject of research; there is a paucity of studies on acculturation among Iranian older immigrants. Due to the unique cultural characteristics of Iranian immigrants along with their growing numbers in Canada, this study aims to examine acculturation of Iranian older adults in relation with their mental health and psychological well-being.

Viewing acculturation in relation to mental health has been the topic of several cross-cultural studies across ethnic groups. For this study, I assumed that levels of acculturation in Canadian society are associated with both life satisfaction and depressive symptoms among older Iranian immigrants (N = 107 Iran-born immigrants 50+ years of age).

Chapter 2: Literature Review

Models of Acculturation

Acculturation refers to the process and stress of cultural changes experienced by members of a minority culture as they adapt to a new host majority culture (Berry, 1980; Meyler, Stipton, & Peek, 2006). It is believed that acculturation takes place at both individual and societal levels (Rudmin, 2009). At the individual level, acculturation is viewed as acquisition of a second culture as opposed to enculturation or acquisition of a first culture. At the societal level, change and assimilation in values and cultural patterns occurs due to ongoing contact between cultures. This is reflected in preferences for certain foods, friendship and customs as well as changes in behavioural patterns.

Chang, Tracey, and Moore (2005) identified three separate models of acculturation. The first is Suinn and colleagues' (1987) model which views acculturation across a continuum or dimensions, ranging from *very identified with own culture* to *very identified with the dominant group culture*. Accordingly, individuals are situated along this continuum according to the way that they identify with one culture, or distance themselves from another. Biculturalism or joint identification places the individual at the middle of the continuum, reflecting an affinity for both. In many recent studies, biculturalism or integration appears to be a favourable and positive strategy adopted by immigrants contributing to better psychological well-being and health (Schwartz et al., 2010).

Another view of acculturation has been proposed by Berry (1989). Similar to Suinn, the major tenet of his model is that change occurs due to contact with a different culture, but also views acculturation within separate and distinct modes of adaptation (Shim & Schwartz, 2008). More precisely, acculturation is defined along two orthogonal dimensions of ethnic and dominant

group identification by which four modes of adaptation may emerge: integration (i.e., where both ethnic culture and dominant culture are respected and valued equally); assimilation (i.e., when the individuals value the dominant culture only); separation (i.e., where only the ethnic culture is valued in the host society); and marginalization (i.e., where neither culture is valued; Chang et al., 2005). This 2-dimensional model (unlike one dimensional continuum of Suinn), accounts for joint identification as high identification of persons with both cultures. Hence, a feature of this 2-dimensional model of acculturation is that the retention of the original culture can exist independently of orientation towards the larger host society (Chia & Costigan, 2006).

Lastly, the stage model of acculturation (Sue & Sue, 2003) posits five stages: conformity, a phase in which individuals have a positive view of the dominant group and negative attitudes towards their own; dissonance, a phase in which conflict between the two attitudes emerges; resistance/immersion, where positive attitudes toward one's ethnic culture and negative views of dominant culture are expressed; introspection, characterized by rethinking of pro-ethnic group/anti-dominant group viewpoints; and finally, integrative awareness, which involves coming to the realization that there are both negative and positive aspects of all cultures (Chang et al., 2005).

Acculturation has mostly been studied in relation to the integration of certain ethnic groups of immigrants within European, Australian and North American societies. Due to their sizable numbers, Hispanic and Asian immigrants have been the primary groups which acculturation in North America has most often been studied. Persons born in the Middle East have been comparatively under-studied as immigrants.

There seems to be a general consensus as to the inevitability of emotional and psychological stress experienced by new immigrants during the process of adjusting to a new culture. Since this stress can motivate new immigrants to adopt new skills and behaviours to enable adaptation, it should not always be interpreted as a negative process. Similarly, findings

and theories vary in recognizing the relationship between mental health and the process of acculturation. One view contends that more adjustment difficulties are experienced by those who tend to retain their native culture, whereas others have expressed the opposite viewpoint, believing that greater stress and distress are associated with assimilation and adoption of a host culture (Lum & Vanderaa, 2009). Biculturalism and integration of both cultures is believed to foster adjustment (Ghaffarian, 1998) and generally is believed to be an optimal mode of adaptation in terms of well-being and health.

Language Acculturation

There have been a number of studies which emphasize language as integral to acculturation. Language (or linguistic) acculturation suggests that over the course of adjustment, new immigrants increasingly become accustomed to understanding and use of their host country language(s), enabling them to access services and broaden their social networks. Since lacking English has been found to be associated with distress among immigrants, charter language skills has been examined as predictors of mental health (i.e., the ability to read, write and speak; Tran, Sung, & Huynh-Hohnbaum, 2008).

Learning the host culture language benefits older immigrants in many ways including health education, adopting more active life styles (Crespo et al., 2001), and improved living arrangements (e.g., strong English language skills have been found to increase the likelihood of living independently; Burr & Mutchler, 2003). Conversely, poor English communication skills are associated with psychological distress and greater depressive symptoms across samples such as elderly Russian-born (Tran et al., 2008; Tsytsarev & Krichmar, 2000) and Chinese immigrants (Casado & Leung, 2001; Lam, Pacala, & Smith, 1997). Among elderly immigrants in general, higher levels of distress appear to be associated with difficulties in new language acquisition (particularly with recent immigrants), and cognitive and mobility decline. Older immigrants in Canada tend to access available social and support networks within their ethnic communities

rather than participating in the mainstream cultural milieu though this may impede use of social and health services. Existing social networks within the family and their ethnic community may somewhat buffer poorly acculturated immigrants from distress (Wu & Hart, 2002).

Acculturation and Health

One significant implication of acculturation may be attainment of better health outcomes via proactive use of health services. This question has been posed in previous studies. While Prus, Tfaily, and Lin (2010) found that older age groups of foreign-born Americans experience significant disadvantage in health status and access to services, it has been suggested that acculturation can alleviate disparities among the diverse ethnic older populations (Abraido-Lanza et al., 2006). Some have identified an association between language acculturation and health locus of control (Meyler et al., 2006). Also of note, language acculturation among older Mexican-Americans appears to minimize the adverse psychological effects of aging and may also foster self-esteem by increasing communication opportunities and by expanding social networks (Meyler et al., 2006).

Conversely, other studies have identified certain negative consequences of acculturation. For instance, acculturation can influence the lifestyle choices of people in a way that it may increase health risks, in accord with negative health behaviours in Western societies (e.g., poor dietary practices). These have been observed among Mexican-Americans (Gonzales, Haan, & Hinton, 2001), such as obesity (Sundquist & Winkleby, 2000), Type II diabetes (Hazuda et al. 1988; Tucker, Bermudez & Castaneda, 2000), and cardiovascular disease (Sundquist & Winkleby, 1999).

In the domain of mental health, findings have been somewhat contradictory as to whether acculturation results in positive or negative consequences. It seems that other psychosocial factors moderate or mediate the association between acculturation and mental health. One important factor could be age. With respect to the effects of acculturation on the mental health of aging

immigrant Latinos, bilingual older adults with Alzheimer disease tend to revert to the language of origin versus the language which acquired later in life possibly due to recent memory loss (Yamada et al. 2005). Secondly, the degree of pressure to assimilate in later life is related to age at immigration. Yet existing acculturation measures are usually age non-specific. Moreover, older immigrants may be committed to passing traditions on to the next generation and therefore may be resistant to assimilation. Finally, opportunities for assimilation or biculturation may differ across older immigrant groups. For example, participation in educational and work domains influences the process of acculturation. Obviously, older immigrants who arrived late in life may not have had educational and employment opportunities in the host country, and may have had fewer acculturative opportunities as a result. Hence, demographic and socioeconomic differences need to be taken into account when examining the association between acculturation and aging (Yamada et al., 2005).

Socioeconomic Status, Mental Health, and the Acculturation of Older Immigrants

It has been suggested that the association between higher levels of acculturation and better mental health outcomes can be explained by the fact that some individuals may have better access to resources, and benefit from available services, because of their greater socioeconomic status (Berry & Kim, 1988; Myers & Rodriguez, 2003); this in turn, leads to better mental health (Jang, Kim, & Chiriboga, 2005). Although the relationship between health and socioeconomic factors among ethnic and disadvantaged groups has been extensively investigated, studies examining the interrelation of acculturation, socioeconomic factors (SES) and the health status of individuals in ethnic communities seem to be scarce. In their study of Salvadorian immigrants to the U.S., Bertera, Bertera, and Shankar (2003) found a strong association between obesity and acculturation; but when SES factors such as income and years of education were taken in to the account, this association was less pronounced.

Other indicators of mental health among low-income seniors suggest the possible contribution of SES factors. Support for this assertion has been provided by research indicating a link between residence in low-income neighbourhoods and the mental health of older residents (Espino et al., 2001; Simpao et al., 2005).

Immigration status, along with sex and education, may also be germane to immigrants' health and welfare (Kirkcaldy, Furnham, & Siefen, 2009). Voluntary emigration versus forced immigration as experienced by refugees may be an important factor affecting adjustment and well-being. Other demographic variables may also be factor. For example, Chow (2010) reported that education, country of origin, use of medications, physical mobility, and perceived financial need were significantly associated with physical well-being, whereas sex, marital status, length of residence, education and physical mobility were significantly related to psychological well-being of older Chinese immigrants in Canada.

Acculturation and Mental Health

As mentioned before, a number of studies have examined the association between acculturation and various indicators of mental health with most emphasis placed on stress responsivity and depression. For example, it has been suggested that the self-esteem of Mexican-American older adults is positively associated with language acculturation irrespective of depressive symptomatology (Meyler et al., 2005). Gonzales, Haan and Hinton (2001) reported greater depressive symptomatology among older Mexican-Americans than those of non-Hispanic and African-American ancestry. They concluded that acculturated elderly Latinos who have enhanced understanding of the host culture and access to educational, job opportunities and medical and social resources, experience greater well-being than less acculturated seniors. They also concluded that isolation resulting from language barriers diminishes perceived self-efficacy and fosters psychological stress.

Jang, Kim, and Chiriboga (2005) examined acculturation among elderly Korean-Americans and depressive symptoms in the context of Confucian ethics and modesty (as characteristic of Korean culture). More precisely, expressed emotion may be associated with depression among less acculturated Korean-American seniors. Mui and Kang (2006) found high rates of depression (40 percent) in their sample of Asian immigrants in the United States. They found that acculturation stress, manifested as a cultural gap between themselves and their adult children, was associated with depression. Other predictors were poor perceived health, religiosity, length of residency and proximity, and assistance they receive from their children.

The relationship among self-reported health, acculturation and ethnicity has been assessed among immigrants from Poland, Turkey and Iran living in Sweden (Wiking, Johansson, & Sundquist, 2004). One finding specific to Iranian immigrants was that women with lower SES, poor acculturation and who reported discrimination also reported lower perceived health. Overall, poor acculturation and discrimination were identified as two primary factors explaining the association between ethnicity and poor self reported health (aside from lower SES). Yet noted by various researchers, self-reported health may not be an ideal or accurate indicator as particular cultures tend to underestimate or exaggerate health perceptions due to cultural and economic differences (Shatterly et al., 1996; Wiking, Johansson, & Sundquist, 2004).

Acculturation among Iranian Immigrants

Although emigration from Iran is an ongoing phenomenon, acculturation of this ethnic group within host countries has rarely been studied. Foroughi, Misajon, and Cummins (2001) investigated the impact of migration on subjective well-being by comparing Iranian-Australian, native-born Australians, and Iranians residing in Iran. They found that Iranian-Australians who migrated at an older age, reported lower subjective quality of life; their number of years of residency in Australia did contribute to predicting their social integration. These authors contend that there are homeostatic mechanisms that work to maintain a higher subjective life quality at a

consistent level such that all three groups maintained normative levels of life satisfaction. The authors, however, did not clarify the nature of these mechanisms. This study also did not specifically target older age groups; moreover, acculturation was not measured.

In a qualitative study, adaptation strategies were examined among older Iranian women residing in the United States (McConatha et al., 2001). The themes which emerged from interviews (including three general adaptation strategies of "withdrawn", "insular" and "assimilative) corresponded to Berry's acculturation theory (1989). Among these categories, "withdrawn" older women reported the greatest sense of dissatisfaction and cultural loss; they were either unable or unwilling to engage in most social activities other than interacting with immediate family members. Overall, individual characteristics such as optimism, a sense of challenge, and the emotional tone of past memories were identified as major factors contributing to differences in adaptive mechanisms to a new cultural milieu. This finding warrants further investigation regarding the contribution of person-specific factors in adjustment to a new culture.

The relative contribution of idiosyncratic and unique life experiences have also been examined among older Iranian women in Canada (Shakeri-Shemirani & O'Connor, 2006). In-depth and semi-structured interviews suggest interactions between aging and immigration experiences. Two primary themes to emerge were the importance of each woman's immigration story as a context for aging experiences in Canada, as well as the significance of cultural identity and immigration-specific factors in aging processes (e.g., social class, immigration status, religious affiliation).

Ghaffarian (1998) examined the acculturation of Iranian immigrants in the U.S. in relation to mental health. Findings indicated that adoption of American culture along with retaining Iranian native culture, were associated with better mental health status. Results also indicated that both biculturalism and assimilation within the host culture are associated with better adjustment and well-being. Interestingly, age was found to be inversely correlated with

acculturation although no relationship between mental health status and age was found. Resistance to acculturation by older Iranian immigrants was explained by the same factors identified by Yamada and colleagues (2005), namely, more exposure to the native culture and greater reliance on past experiences among older immigrants. The extent of differences between host and native cultural characteristics also partly accounted for successful adjustment and acculturation; these factors are highlighted in a number of studies conducted in U.S.

In Canada where multiculturalism and retention of cultural characteristics among ethnicities are promoted, a unique context for acculturation of immigrants may exist. To characterize the experience of Iranian immigrants in Canada, however, it may be necessary to take into account certain historical and socio-political events. In the decades following the Islamic Revolution of 1979 and the subsequent Iran-Iraq War, the influx of Iranian to Canada was largely involuntary as characterized by the large numbers of refugee claimants in contrast to the previous waves of Iranian immigrants (1964 -1978) with professional credentials who chose to leave Iran (Moallem, 1999). It seems reasonable to contend then that involuntary emigration from Iran by more recent immigrants may make the process of acculturation and adaptation to the host culture more challenging. Though not unique to Iranian-Canadians, immigrants who wish to maintain Iranian citizenship are allowed dual citizenship (Shahim, 2007); this may facilitate adherence to their culture of origin.

Access to Health Services by Older Ethnic Groups in Canada

It has been suggested that because of Canadian immigration policies, the overall health status of immigrant populations in Canada may be better than the general population (Wu & Hart, 2002); but as the immigrants reach later life, their health status is more likely to correspond to that of their native-born counterparts. A well documented health trend specific to Canadian society known as *the healthy immigrant effect* posits that the higher health profile of immigrants at time of arrival gradually converges with the native-born population over time (Newbold &

Filice, 2006). A similar pattern has been observed with regard to mental health status. Psychiatric epidemiological data reported by Strainer and colleagues (2006) suggest that among participants aged 55 to 64 years who immigrated to Canada after age of 18, the prevalence of mood and anxiety disorders was almost half that of their Canadian-born counterparts; these rates, however, are nearly identical for those over 74 years of age.

A review of the existing literature regarding the mental health of older immigrants in Canada reveals inconsistencies as to the salience of cultural variables, in terms of both mental health assessment and the efficacy of interventions for culturally diverse groups. For example, Sadavoy and colleagues (2004) studied barriers to mental health service utilization among ethnic seniors in Canada. They concluded that the dearth of culturally sensitive mental health workers is the most apparent problem in service provision. More precisely, few psychiatrists share the same ethnic background as immigrant seniors; as a result these clinicians are overworked and pressed for time. In addition, the absence of formal mental health services within community agencies dealing with immigrants has also been recognized as a significant barrier to access.

The stigma associated with mental illness may be more pronounced among older cohorts, particularly among those of Asian and Middle-Eastern ancestry as in the case of older Iranians. A community information forum held by Iranian-Canadian Social Service Providers Network (ICSSPN) and the Centre for Addiction and Mental Health (CAMH), in fact, identified language barriers and lack of knowledge about the mental health system along with mental health stigma as the greatest challenges facing the Iranian-Canadian community (CAMH, 2007). According to Sahami Martin (2009), older Iranian immigrants may have different definitions of mental health and illness compared to Western-born older adults; this may result in a different pattern of help-seeking behaviours and willingness to accept treatment.

Discrepancies in Definitions of Immigration-related Variables

Problems inherent in generalizing findings from previous research, in part, are due to divergent definitions and terminology, policies and cultural variables between ethnic groups. For example, immigrant groups may employ different coping strategies due to differences in their level of receptivity in various societies.

Another limitation of existing acculturation studies is the lack of attention to variables such as the length of residency or immigration status (e.g., refugee vs. family reunion status). Surprisingly, some authors have considered it sufficient to categorize participants simply as foreign-born or native-born, seemingly unaware of the fact that in Canada, recent older immigrants may differ considerably and be more heterogeneous than those who immigrated to Canada decades ago and grew old within Canada. Ascertaining the length of residency in the host country, and the age at which they emigrated, may well provide further understanding of acculturation in relation to the mental health of older Iranian immigrants in Canada.

Methodological Issues

Barresi (1990) has identified a number of problems with ethnic older adult research. One issue concerns the comparability of measures and discrepancies in meanings where questionnaire items are translated from one language to another. It is important to know that some native speakers may perceive different meanings to words than those intended (e.g., literal vs. figurative translations). Although back-translation may reduce such issues, this discrepancy may still remain. Another methodological issue is the position of the researcher vis-à-vis the community under study (Barresi, 1990). For this thesis, the student shares the ethnic background and better cultural understanding of the participants. This similarity also facilitated access to community agencies thus participant recruitment.

Statement of Hypotheses

In accord with the existing literature, I hypothesized that levels of acculturation would predict satisfaction with life among Iranian older immigrants in Metro Vancouver. In addition, I hypothesized that levels of acculturation would predict depressive symptomatology in the sample. Several socio-demographic variables, including length of residency and perceived discrimination in Canada, along with descriptive data and general health status, were assessed. Socio-demographic and health variables were examined as prospective covariates affecting the associations between acculturation and both life satisfaction and depressive symptoms.

Chapter 3: Methodology

Participants and Recruitment

Responses were obtained from 107 participants for this study; data collection began in June 2010 and was completed by year end. Of this number, four were omitted due to an inordinate total of missing responses leaving 103 cases for subsequent analyses. The percentage of missing responses across standard scales was estimated to be less than 5 %. The linear interpolation method was used to impute for missing responses. This method replaces missing responses using the last valid item value before the missing response and the first valid item value after the missing response.

Prospective participants were recruited from11 different centres (i.e., North Vancouver, West Vancouver, Vancouver, Coquitlam, Burnaby and Richmond). Many of these sites have programs specifically tailored for Iranian older immigrants (e.g., senior centres and community centres), while some others were Iranian-specific organizations hosting cultural and educational events for this community. Comparative analyses across recruitment sites revealed no significant differences in responses to study instruments even though age (F= 4.45, p<.01) and years of formal education (F= 3.618, p<.01) did significantly differ across sites. These demographic differences were expected because some programs are age-specific, whereas some others were designated for skilled middle-aged immigrants in search of job and language training. Overall, comparative analyses suggest no biases specific to facility factors.

Inclusion criteria for participating in this study were: 50+ years of age; born in Iran; and ability to read and write Farsi (Persian) as all instruments were administered in Farsi. This decision was made to enable recruitment of both long-term and recent immigrants to Canada, and the full range of acculturation levels.

Letters were first sent to administrators of the agencies and organizations to ask for their cooperation on SFU Gerontology department letterhead. A study information cover page (written also in Farsi) explained the general goals of this research, provision of participant anonymity, data security procedures, and contact information should prospective participants require further information or clarification.

In total, 47 participants mailed their instruments upon completion (provided postage-paid return envelopes). The rest completed questionnaires during break times in activity programs. To provide anonymity, participants who provided responses during break times, left completed instruments in a box designated for this purpose. Those who returned questionnaires by mail were asked not to write their names/addresses on return envelopes. To foster candid responding, it was emphasized that identifying information was neither required nor collected.

Descriptive Features of the Sample

This sample was composed of 44 men and 53 women. The average age of participants was 66.36 years (*SD* = 7.79, range 50-84). Occupations in both Iran and Canada were coded, using an index of occupational classification (Barona, Reynolds & Chastain, 1984). The single largest proportion (30.1%) fell into managerial, official, administrative and clerical category in Iran. This category of occupational status, however, was markedly lower in Canada (2.9%). Reduced occupational status after immigration to Canada was reported by 50% of those who responded to this question.

Participants completed 14.5 years of education on average (*SD*= 3.45, range 5-24). Men on average reported roughly three more years of education than women. The immigration status of participants was composed of Canadian citizens (34.0%), followed by family sponsorship (31.1%) and landed immigrants (26.2%). Refugees comprised 6% of the sample. It should be noted that there could be overlap between some categories of residency status as, for example, some sponsored family members may have described themselves also as immigrants, or current

Canadian citizens may have come to this country many years ago as refugees. Additionally, 18.4% of the sample indicated that their decision to leave Iran was involuntary, whereas 65% immigrated voluntarily.

Sixty-six percent of the sample was living with relatives whereas 25.2% were living separate from family. With regard to religious affiliation, more than three-quarters (77.7%) indicated they are Shiite Muslims. Remaining participants reported Baha'i, Zoroastrian, 'other' and no religion in roughly equal proportions.

Of the sample, 35.0% preferred social interactions mostly with other Iranians; 32.0% only with Iranians and 29.1% with both Iranians and Canadians. Only 1.0% preferred having social interactions most often with Canadians. These responses reflect the social aspects of each mode of acculturation as described by Berry (2002).

Since immigration to Canada, 69.9% indicated that they had never experienced overt discrimination in Canada (e.g., racial slurs); 1.9% reported personal experiences of discrimination. Moreover, 7% reported subtle discrimination as immigrants while almost 50% reported no perceived subtle discrimination (e.g., denied promotion at work).These responses suggest that participants generally have felt welcomed in Canada.

Health Status

The number of health problems reported by participants was 3.55 on average (*SD*=3.01), and ranged from 0 to17. They also rated their subjective or perceived health as 2.9% very poor, 5.8% somewhat poor, 3.9% poor, 35% satisfactory, 34% good and 12.6% very good. The majority of the sample (63.1%) reported their health status was unchanged compared to last year, while 22.3% indicated their health was better, and 12.6% worse. Interestingly, 59.2% reported that compared to other people of the same age their health status was better, while 30.1% believed that their health status was similar. The majority (50.5%) also reported that their health problems interfere minimally with their everyday activities. While 25.2% expressed that they have accessed

(or tried to access) mental health services, 65% indicated that they had not sought out or accessed these services (or did not feel they are in need of such services). This can be explained by traditional view of mental illness as stigma among older generations of Iranians (Dejman, et al., 2010).

Study Measures

Questionnaire packages were composed of three standardized scales, one socio-demographic and two health measures (Farsi in each instance). Participants were asked about experiences of discrimination in Canada (both overt and covert), current living arrangements (e.g., alone or with family), length of residency, religious affiliation, and the circumstances precipitating their immigration to Canada. Health questions measured both perceived and objective health. Finally, an open-ended question asked participants to describe their experiences as immigrants to Canada. Qualitative responses were sought to provide additional insights regarding the acculturation of respondents.

To identify any order effects, scales were counterbalanced in two questionnaire formats. Comparative analyses indicated that the order of instruments did not impact response levels. In other words, no order effects were identified.

Study Instruments

Iranian Acculturation Scale: While previous studies have used the self-developed measures of acculturation, more recent studies have adopted instruments that have undergone more thorough psychometric evaluation. The Iranian Acculturation Scale (IAS; Shahim, 2007) was developed in Farsi to assess cultural identity, attitudes and language expression and preferences. Responses to this measure have exhibited preliminary reliability and validity. Unlike previous acculturation scales which primarily examine language usage as the sole criterion of acculturation, the IAS measures additional elements such as family related attitudes, family-

related values and cultural identity (Shahim, 2007). These constructs have been identified by factor analysis.

Ethno-culturally sensitive scales such as this instrument can be used to assess the association between acculturation and other variables. Whereas acculturation stress involves emotional strain and psychological distress (e.g., anxiety, confusion, insecurity and lower self-confidence; Shim & Schwartz, 2008) older immigrants, due to age related changes, may experience these differently than younger cohorts. Hence, it was deemed imperative to assess the correlates of these psychological factors relative to acculturation.

This 26 item Likert-type scale was developed in accord with Berry's (1999) multidimensional model of acculturation. The IAS includes items specific to preferences for the host country or Persian language, eating habits, identification with ethnic group or host country, and values and customs of the host and native countries. Item responses are provided along 3 - and 5 -point Likert-type scales. A final acculturation score is calculated by dividing the total score (sum of numerical rating for all 26 items) by the total number of items. Response alternatives range from (1) *low acculturation* or greater adherence to Iranian values to (3) *high acculturation* or greater adherence to Canadian culture. The total score also can be interpreted based on Berry's model as score 1 represents 'separation'; 2 represents 'integration'; and 3 represents 'assimilation' (Shahim, 2007)

Psychometric properties of responses to this scale have been reported with a sample of 119 Iranian-born Canadians (Shahim, 2007). Internal consistency of responses was calculated as $\alpha = 0.83$ indicating good interrelatedness of items. The correlation coefficient between acculturation and number of years in Canada and age upon arrival in was $r = 0.38$ and $r = -0.48$, respectively. As anticipated, the longer a participant had lived in Canada and the earlier the age of immigration, the higher his/her reported acculturation. Item-total correlation coefficients ranged

between $0.25 \leq r \leq 0.65$. Factor analyses identified four factors labelled language, cultural identity, family-related attitudes, and family-related values.

This scale was previously used to assess acculturation of Iranian-born mothers in Toronto vis-à-vis the social skills and behavioural problems of their children (Shahim, 2007). This thesis was the first study to administer this scale to older Iranian-born immigrants in Canada. Of note, no other validated instrument in Farsi has yet been developed to measure acculturation specific to older adults. Although this thesis aimed to identify discrete modes of acculturation as described by Berry (2002), due to inability to categorize modes of acculturation, I treated responses to IAS as a single continuous measure of acculturation to test study hypotheses.

Satisfaction with Life Scale: The SWLS is a widely-used measure of life satisfaction (Diener et al., 1985) consisting of five questions with responses recorded along a 7-point Likert-type scale. The SWLS was developed as a measure of person-specific or subjective well-being (Pons et al., 2000). Higher response levels correspond to greater life satisfaction.

Psychometric properties of responses to the SWLS have been examined across several groups and different ethnic populations. Diener and colleagues (1985), reported good internal consistency of responses to this scale, and item-total correlations ranging between $0.61 \leq r \leq 0.81$. Furthermore, responses have demonstrated good convergent validity with similar measures of emotional well-being (Pavot & Diener, 1993). In clinical domains, responses to SWLS have been shown to correlate negatively with measures of psychological distress (Pavot & Diener, 1993) such as Beck Depression Inventory (Blais, Vallerand, Pelletier & Brière, 1989; $r = -0.72$, $p < 0.01$) and the Symptom Checklist-90 (anxiety: $r = -0.54$, depression: $r = -0.55$, and general psychological distress $r = -0.55$; Arrindell & Ettema, 1986).

Responses to the SWLS have shown invariance or equivalence across age groups. For instance, Pons and colleagues' (2000) findings suggest factorial invariance of SWLS responses

between adolescents and older adults. Results indicated no statistically discernable differences between age groups.

Wu, Chen, and Tsai (2009), using factor analysis have measured the invariance of this scale across time, and reported a moderately high stability coefficient and satisfactory psychometric properties of responses to this scale in longitudinal research.

Specific to the Farsi version of this scale, the cross-cultural utility of the SWLS has been documented in several studies. Bayani, Koucheki, and Goodarzi (2007) examined the reliability and validity of responses to the SWLS with a group of university students in Iran. The reliability was assessed by Cronbach's alpha ($\alpha = 0.83$); test-retest reliability was reported as $r = 0.69$ over 1 month. Positive correlation coefficients with responses to the Beck Depression Inventory ($r = 0.71$) and the Oxford Happiness Inventory suggest concurrent and divergent validity, respectively. The Farsi version of the SWLS was obtained from Bayani, Koucheki and Goodarzi for this thesis.

Center for Epidemiologic Studies Depression Scale (CES-D): Responses to this 20-item measure of depressive symptoms are provided along a 4- point Likert-type scale ranging from (0) *rarely or none of the time* to (3) *most or all of the time* (Radolff, 1977). Scale scores range from 0 to 60, with higher scores representing higher levels of depressive symptomatology.

Internal consistency of responses to the original English version of the CES-D is high ($\alpha = 0.85$ in the community, $\alpha = 0.90$ in psychiatric settings; Radolff & Locke, 2000). Split-half reliability ranges between $0.77 \leq r \leq 0.92$, and test-retest reliability measured at 2 and 8 week intervals reflect moderate to high correlation coefficients ($0.51 \leq r \leq 0.67$) which is desirable when measuring a construct expected to change over time (Radolff & Locke, 2000). Roberts, Vernon, and Rhodes (1989) assessed the effects of ethnic status (Anglo/Mexican) and language (English/Spanish) on the reliability and validity of responses to the CES-D and found no systematic variation in test-retest reliability or internal consistency.

Although several studies have assessed psychometric properties of this scale among ethnically diverse groups, as of yet no psychometric research has yet been undertaken to examine the validity or reliability of responses to the Farsi version of the CES-D. This scale was translated for use in Iran. The Farsi version of the CES-D translated by Sajjadi and colleagues (2008) was used for this thesis.

Analytical Procedures

Hierarchical Regression: The hypotheses of this study were tested using hierarchical regression (Cohen, Cohen, West, & Aiken, 2003). Linear regression attempts to model the relationship between variables by fitting a linear equation to fit derived data. With hierarchical linear regression, the order of entry of the predictors is specified in blocks, as opposed to simultaneous entry of all independent variables into the equation.

First, socio-demographic variables, then physical health responses, and finally acculturation, were entered to ascertain the unique contribution of prediction of acculturation over and above contextual factors. I computed two 3-step hierarchical regression equations to examine acculturation as predictors of both depressive symptomatology and life satisfaction. The statistical control (or covariation) for physical health is warranted as previous research indicates that physical health (both perceived and health conditions) is significantly associated with depressive symptomatology (O'Rourke, Cappeliez, & Neufeld, 2007). Hence, control for this variable alongside socio-demographic variables enabled me to identify the unique contribution of acculturation to psychological well-being.

According to Cohen (1992), a sample size of 107 participants provides sufficient statistical power for these multiple regression analyses with seven independent variables assuming medium to large effect sizes and a standard alpha level (i.e., $\alpha = .05$).

Depressive symptomatology and life satisfaction served as the dependent variables for this thesis. Independent variables included socio-demographic variables (e.g., immigration-specific factors and discrimination), physical health and acculturation.

To ascertain which socio-demographic variables to include in regression analyses, correlation coefficients were first examined. Step 2 included physical health variables. Step 3 tested the predictive strength of acculturation in relation to both depressive symptomatology and life satisfaction. Levels of acculturation served as the primary independent variable.

It was hypothesized that acculturation levels would have a statistically significant association with both depressive symptomatology and life satisfaction after controlling for socio-demographic and health variables. This result would identify acculturation as a predictor of well-being among Iranian older immigrants in Canada. More precisely, acculturation was hypothesized to be significantly associated with both depressive symptomatology and life satisfaction despite statistical control for socio-demographic, immigration-specific, and physical health factors.

Chapter 4: Results

Responses to Iranian Acculturation Scale (IAS) indicated that most of the participants had adopted a bicultural (integration) strategy of acculturation (M =2.05). Responses to Satisfaction with Life Scale (SWLS) also revealed that they were relatively satisfied with life (M = 25.01). Conversely, responses to the Centre for Epidemiological Studies-Depression Scale were high (M = 16.97); in fact, more than one half of the sample (52.4%) provided responses within clinical range (i.e., CES-D > 15/60). Comparative analyses revealed that 66.0% were women and 34%were men revealing significant between-sex differences in depressive symptoms. Further comparison revealed a statistically significant difference between women (M = 19.45, SD=10.89) and men (M = 13.35, SD=8.39; t = 3.03, p<.01).

Voluntary or involuntary nature of immigration was also significantly associated with CES-D responses; more precisely, average CES-D responses of voluntary immigrants were 14.42/60 (SD = 9.58), while involuntary immigrants had a mean score of 25.68/60 (SD=10.28; t = 4.27; p<.01). This result demonstrates a significant relationship between involuntary immigration (forced migration) and depressive symptomatology.

Table 1 reports the psychometric properties of responses to study instruments. These are acceptable, except internal consistency for Iranian Acculturation Scale. Internal consistency of perceived health responses was also below the .70 threshold value; yet this is likely due to the comparatively few items in the perceived health scale (O'Rourke & Hatcher, & Stepanski, 2006). Low internal consistency of IAS responses is later discussed in relation to study findings.

Table 1.

Descriptive properties of the study variables (N=103)

Variables	*M*	*SD*	Range	α	Kurtosis	Skewness
Iranian Acculturation scale	2.05	.24	1.54-2.81	.62	.74	.71
Satisfaction with life Scale	25.01	5.60	9-35	.81	.05	-.56
CES -Depression Scale	16.97	10.37	0-14	.86	-.52	.46
Demographics :						
Age	66.36	7.79	50-84	-	-.64	-.00
Years of residency in Canada	9.27	8.32	0-37	-	.60	1.04
Years of formal education	14.5	3.45	5-24	-	1.30	-.14
Number of Health Conditions	3.55	3.01	0-17	-	3.45	1.40
Perceived Health (4 items)	11.40	2.25	4-16	.63	1.16	-.82

Correlations between Variables

A low positive correlation coefficient emerged between responses to IAS and SWLS. In addition, a low negative correlation emerged from responses to IAS and the CES-D. As expected, a negative moderate correlation was found between responses to CES-D and the SWLS. As reported in Table 2, length of residency in Canada was found to be correlated with responses to SWLS as anticipated, and also with acculturation.

A low positive correlation emerged between responses to CES-D and age. A negative moderate correlation also emerged between responses to CES-D and years of formal education. Moreover, a positive and moderate correlation was found between CES-D scores and health conditions. A strong negative correlation coefficient emerged between perceived health and responses to CES-D. Perceived health also had a low positive correlation with satisfaction with

life. As anticipated, age was positively associated with both length of residency and number of health problems, but not with perceived health. As expected, a moderate negative correlation also found between perceived health and health conditions.

Table 2.

Correlation Coefficients between Responses to Acculturation Scale, Mental Health Instruments, Socio-Demographic and Health Variables

VARIABLES	1	2	3	4	5	6	7
1) IAS							
2) SWLS	.23*						
3) CES-D	-.07	-.32**					
4) LRC	.22*	.25*	.12				
5) AGE	-.08	.10	.28**	.29**			
6) EDUC	-.07	.02	-.34**	-.15	-.16		
7) NHP	-.11	-.22*	.38**	.21*	.25**	-.12	
8) PH	.02	.26**	-.51**	-.04	-.14	.20	-.46**

Note. IAS= Iranian Acculturation Scale; SWLS= Satisfaction with Life Scale; CES-D= Centre for Epidemiologic Study-Depression Scale; LRC=Length of Residency in Canada; AGE=Age of the participants; EDUC= Years of formal education; NHP= Number of reported health problems; PH= Perceived health.
*p<.05, **p<.01

Change in Occupational Status: Iran and Canada

Analyses of change in occupational status following immigration to Canada indicated that 26.2% of participants lost status whereas 21.4% remained within the same category; only 5% gained status (47.6% did not respond to this question). Comparative analysis indicated a

significant difference in life satisfaction between the loss of occupational status groups (M = 24.33, SD = 4.06) and the no change in status group (M = 26.77, SD = 4.47; t = [47] 2.00; p< .05). No significant between-group difference emerged in depressive symptomatology. (The gaining occupational status group was omitted from the analyses, due to its low numbers.)

Regression Analyses

As proposed, two separate regression analyses were computed to identify whether acculturation predicts satisfaction with life and depressive symptomatology while controlling for both socio-demographic and health variables. Independent variables were the same for both regression equations.

H.1 Satisfaction with Life: I hypothesized that acculturation would predict satisfaction with life among older adult Iranian immigrants in Canada, controlling for both demographic and health variables. Hierarchical regression was computed with satisfaction with life as the dependent variable. Preliminary analyses showed no violations of multiple regression assumptions.

In the first step, three socio-demographic variables (sex, age, and residency status) were entered. It should be noted that due to missing responses, various demographic variables could not be included in the regression analysis (i.e., loss of statistical power). This first block of variables did not contribute with significant prediction of satisfaction with life. (Following the final step of this model, however, a unique contribution for age emerged, β= .26, p <.05).

In the next block, health conditions and perceived health were entered. These two health variables accounted for an 11% increase in observed variance in life satisfaction (ΔR^2 =.11 p <.01); of these two variables, a unique contribution for perceived health (but not health conditions) emerged (β= .24, p < .05).

Lastly, acculturation was entered as a third and final block accounting for as additional 6% of the variance (ΔR^2 = .06 p < .05); acculturation contributed significantly to prediction of satisfaction with life (β= .24, F [6, 84] = 3.20, p <.05), over and above health variables. In total,

independent variable accounted for 19% variance in life satisfaction. Therefore, my hypothesis was supported that higher levels of acculturation predict satisfaction with life among older adult Iranian immigrants in Canada, over and above demographic and health variables. See Table 3.

Table 3.

Regression Analyses of Socio-demographic, Health Variables, and Acculturation as predictors of Satisfaction with Life (N=88)

Variables	*B*	*SE B*	β	ΔR^2	Total
Step 1				.02	
Sex	.79	1.14	.07		
Age	.19	.08	.26*		
Residency status	-.78	.53	-.17		
Step 2				.11**	
Health Conditions	-.28	.21	-.15		
Perceived Health	.60	.28	.24*		
Step 3				.06*	
Acculturation	5.55	2.31	.24*		
					19%

*p <.05, ** p <.01

H.2 Depressive Symptomatology: Regression was next performed to predict depressive symptomatology using the same set of independent variables. Similar to the first hypothesis, it was anticipated that acculturation would emerged as a significant predictor of depressive symptomatology after controlling for both demographic and health variables.

As shown in Table 4, the first block of demographic variables (sex, age, and residency status) accounted for 17% of observed variance ($R^2 = .17$, $p < .01$). Among these demographic variables, a unique contribution for sex ($\beta = .21$, $p < .05$) and residency status ($\beta = .20$, $p < .05$) was observed.

The second block (perceived health and health conditions) accounted for an additional 21% variance ($\Delta R^2 = .21$, $p < .01$). A unique contribution of perceived health ($\beta = -.40$, $p < .01$) emerged in prediction of depressive symptomatology but, once again, not for health conditions.

Acculturation did not lead to a further statistically significant increase in prediction of depressive symptomatology. Therefore, results did not support the second hypothesis that acculturation predicts depressive symptomatology over and above contributing factors. Given the very low correlation coefficient of acculturation and depressive symptomatology ($r = -.07$), reduced power does not seem to be a cause of this non-significant result. As Table 4 illustrates, the two first blocks of the model contributed significantly to prediction of depressive symptomatology

Table 4.

Regression Analysis of Socio-demographic, Health Variables, and Acculturation as predictors of Depressive Symptomatology (N=88)

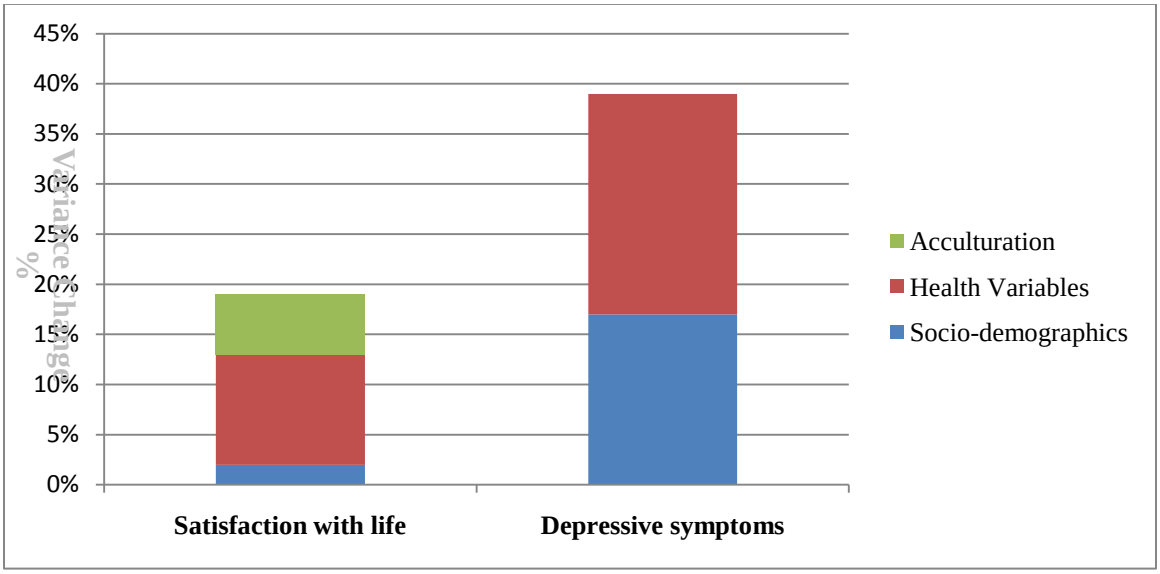
Variables		*B*	*SE B*	β	ΔR^2	Total
Step 1					.17**	
	Sex	4.44	1.80	.21*		
	Age	.10	.13	.08		
	Residency status	1.70	.84	.20*		
Step 2					.22**	
	Health Conditions	.48	.34	.14		
	Perceived Health	-1.85	.45	-.40**		
Step 3					.00	
	Acculturation	-2.91	3.66	-.07		
						39%

*p <.05, ** p <.01

The overall variance explained by the model is 39% in contrast to 20% for satisfaction with life; in large degree, this between-model difference is due to the very large contribution of poor health to prediction of depressive symptoms (but not for life satisfaction). Independent variables selected for regression analyses predicted almost twice as much variance in depressive symptoms versus life satisfaction (Figure 1).

Figure 1.

Comparison of Variance Explained by the Similar Independent Variables Predicting Life Satisfaction And Depressive Symptoms



Notes: Health variables include Health Conditions and Perceived Health, and Socio-demographics include Sex, Age, and Residency Status

Chapter 5: Discussion

Findings from this study support the hypothesis that acculturation is a significant predictor of satisfaction with life among the Iranian older immigrants in Metro Vancouver (over and above both health and socio-demographic covariates). The second hypothesis however, examining acculturation as a predictor of depressive symptomatology was not supported.

One strength of this study was the decision to administer study instruments in Persian (Farsi). This enabled recruitment of a wider range of participants reflecting the range of acculturation levels. Had instruments been completed in English, this would have skewed the results in favour of more acculturated participants; different findings may have emerged.

One unexpected finding of this study was the high rate of depressive symptomatology reported by female participants. Although it is well accepted that depression is more prevalent among women than men (National Institute of Mental Health, 2011), this high rate in a non-clinical sample is of concern. The fact that a number of the older Iranian women recruited in this study were participants in a stress management program (Hamrahan Program, North Shore Neighbourhood House) might explain this high rate of reported symptoms; yet comparative analyses did not reveal differences across various programs in terms of depressive symptomatology (nor life satisfaction). Further research is warranted to address this worrying finding.

This finding is in accord with a prior U.S. study showing high levels of mental health problems among female Iranian older immigrants (Ghaffarian, 1998). A recent meta-analysis comparing the prevalence of depression across Iranian provinces showed nearly twice the prevalence of major depression among Iranian women compared to men (Sadeghirad et. al.,

2010). To date, no Canadian study has examined prevalence of depressive symptomatology among Iranian immigrant groups.

For this study, perceived health emerged a strong indicator of both depressive symptomatology and satisfaction with life similar to findings with south Asian Canadians (Lai & Sourood, 2008). These findings underscore the complex interplay between sex, poor perceived health, and depressive symptomatology among older immigrants in Canada. More precisely, older female Persian immigrants (with lower levels of education) may be especially prone to poor psychological and physical health.

Residency status, particularly being sponsored by children may also be a risk factor for reduced psychological well-being (e.g. dependency to families, and challenges of newcomers compared to those who live independently). As recently reported by Jafari, Baharlou, and Mathias (2010), unemployment, poor language skills, and concerns over social/familial support are primary determinants of poor mental health for Iranian immigrants of all ages in Canada. The consequences of these issues, particularly for elderly women, can be pronounced.

Language barriers (which parallel lower education) may impede access to health and social services. The importance of English language skills pertains not only to interactions with larger society, and also with family members particularly the younger generation who acquire new ways of thinking via the English language (Ajrouch, 2007). The fact that many of these older adults were participants in language classes suggests that they are willing to engage with the host community. But the challenge remains that older immigrants encountered multiple adjustment difficulties such as income and employment. For example, one 65 year old man asserted "… living in Canada is hard for us; on one hand [we deal with] nostalgia, and unemployment makes us suffer since there is no work for my age group...in Iran at least we had retirement income, but this money is like nothing here in Canada [due to the high cost of living] ...the persons who

sponsored us and are supporting us, have their own issues. They support both us and their family..."

One notable finding to emerge from this study is the apparent effect of loss of occupational status upon satisfaction with life following emigration from Iran. This problem was voiced by various participants. Many of them were highly qualified in Iran yet their credentials have not been recognized in Canada causing them to feel useless. For example, a 66 years old male stated that "…I am upset that after 38 years in the medical field that I should now be unemployed and useless…" These findings reflect commonalities between older and younger immigrants in terms of loss of occupational status following immigration to Canada (Jafari, Baharlou, & Mathias, 2010). This subject require further research in terms of both health and immigration policy.

Overall, what can be inferred is that this group of Iranian older immigrants are not fully integrated within the larger Canadian cultural milieu, nor are totally attached to their own cultural, but they appear to have selected elements of the two cultures. Those who are more open to adopt the cultural characteristics of Canadian society over time, however, seem to be more satisfied with their lives than their counterparts who are less integrated into Canadian culture integration (biculturation) seems to be a preferred mode of adaptation for this group.

Of note, however, findings from this study are contrary to previous findings which suggest that integration is the most favourable mode of adaptation in terms of mental health outcomes (Ghaffarian, 1998; Meyler et al., 2006; Schwartz et al., 2010). It is possible that ambiguity and associated stress may come with assimilation and identity confusion as described by a 60 year old woman: "…Canadian culture is different than the culture of our country so sometimes we are confused about which ways are considered right in Canada. It is impossible to be like Canadians completely, but we can be relatively similar perhaps."

A distinction should be made between acculturation studies from the U.S. versus Canada. Whereas, multiculturalism is promoted as a core Canadian value, assimilation is generally

encouraged in U.S (melting pot versus cultural mosaic). Older Iranian immigrants in this sample, similar to other ethnic groups, appear to integrate with Canadian culture over time; and current study findings suggest that the acculturation of older immigrants impact their life satisfaction. My findings also suggest that younger age at arrival (i.e., length of residency) plays a role in both levels of acculturation and satisfaction with life.

It should be noted that the relationship between acculturation and life satisfaction is independent of the relationship between acculturation and depressive symptoms. While life satisfaction seems to be a more idiosyncratic, person-specific and constructed by multiple factors, depressive symptoms are specific to the physical and mental health challenges and individuals' emotions irrespective of cultural practices.

Limitations and Directions for Future Research

There are a numbers of limitations of this study that should be acknowledged. First is the low internal consistency of the acculturation measure. This may partially explain the nonsignificant association between depressive symptomatology and acculturation. I selected an existing measure of acculturation developed in Farsi first, because it would seem to be a culturally-sensitive measure designed for this population; and secondly, preliminary psychometric properties for this measure appeared adequate (Shahim, 2007). Yet this instrument is not age-specific and may contain some items inappropriate for later life; this observation may be germane to both internal consistency and missing responses. This problem was echoed by Yamada (2006) who expressed concern regarding the paucity of acculturation measures validated for use with older adults. An acculturation scale specific to later life could further understanding of acculturation among older immigrants. Scale items would pertain not only to cultural practices, values and attitudes, but also interactions with younger generations (e.g., Canadian born family), health services and social program utilization. For example, is Farsi or English spoken in the

home, do they feel responsible for passing ethnic values to younger generations, and do they prefer western medicine or traditional medical practices?

Other instruments should be developed for use in the future research; ideally, age-specific scales more closely aligned to Berry's modes of acculturation. In IAS used in this study does not perfectly align with Berry's typology; instead, individual item responses reflect these categories

Another limitation of this study was the high number of missing responses to demographic questions, which limited the use of demographic variables in the regression analyses. Nevertheless, due to the strength of association of the predictor variable with the dependent variables, even with reduced power, the results supported the first hypothesis.

Missing responses to socio-demographic questions may be partially explained by the method of recruitment as questionnaires were completed during break times (finite window of opportunity). In other words, participants may not have had enough time to answer socio-demographic questions at the end of questionnaires package (both counterbalanced formats). Completion of the questionnaire at home may have mitigated this issue. Another factor contributing to the high number of missing responses to socio-demographic questions could be the mistrust of this population (Moreno-John et al., 2004). Despite anonymity, immigrants from various Middle-Eastern countries are often reluctant to disclose personal information due to distrust of authorities in their countries of origin.

Finally, the high number of missing responses to occupation-related questions may represent unemployment rather than reluctance to answer these questions. For future studies, methodological refinements are required for more completed descriptive information be obtained from Iranian participants. For example, building initial rapport may foster greater trust between researchers and participants.

Certain demographic questions should be revised for future research. For instance, to more fully ascertain participants' immigration history, participants should be asked their current

immigration status, status upon arrival in Canada, and their pathway to citizenship. Other socio-demographic questions might also be added (e.g., family income).

The present study is unique in many ways including the host country, the ethnic background and the age group of the sample. Yet, I recruited participants living in Metro Vancouver only; generalizing results to older Iranian immigrants living elsewhere should be done cautiously. It is possible that older Iranian immigrants in Vancouver have specific characteristics that may distinguish them from other age groups and other regions of the country. Further research is required to replicate current study findings.

Also, longitudinal research examining acculturation among immigrants from Iran should be undertaken to address the individual and contextual changes that may affect their adjustment over time, ideally from the point of emigration onward.

It is also important to pay close attention to the concept of acculturation and its multi-dimensional nature in relation to the psychological well-being of older adults, including mediating (or moderating) variables such as social connectedness to ethnic community (Yoon, Lee, & Goh, 2008), psychological functioning (psychosocial resources, connectedness, and hassles; Safdar, et. al., 2009), as well as contextual factors affecting acculturation such as sex, family and community reception influence (Leu, Walton, & Takeuchi, 2010). It is possible that older Immigrants within the Metro Vancouver Persian community experience connectedness in distinct ways that affect the process and timing of acculturation. Further research is needed to address in-group connectedness and contextual facets of acculturation. Of note, not all the participants live on the North Shore where there is a relatively well-established Persian community. And though no acculturation differences emerged between programs across various regions of Metro Vancouver, social capital within ethnic communities remains to be examined (cf. North Vancouver vs. Richmond).

Individual differences such as personality traits also may be integral to the process of acculturation; for instance, some participants in this study were eager to take part in activity programs predominated by their Canadian counterparts irrespective of their limited English language skills. More extroverted seniors may not fully comprehend Canadian culture at first, yet their openness to experience and sociability may foster social interaction and promote more rapid and effective acculturation and acceptance – and maybe service utilizations.

In light of the link between acculturation and well-being found in this sample, health policy research should be undertaken to inform programs that facilitate the acculturation of older immigrants in host communities. For example, English language classes specific to older Iranian immigrants might hasten the integration of this ethnic group within the host society. Social programs might also be structured to foster interaction between Canadian-born and ethnic communities. The implications of this study may also inform healthcare delivery. Poor self-rated health appears to be a major component of mental health among older Iranian immigrants. As suggested by Sahami Martin (2009), older Iranian immigrants may hold different definitions of mental health and illness compared to Western-born older adults; different pattern of help-seeking behaviours may be expressed. Further study is required to inform health policy and service delivery.

References

Abraido-Lanza, A. F., Armbrister, A. N., Florez, K. R., & Aguirre, A. N. (2006). Toward a theory-driven model of acculturation in public health research. *American Journal of Public Health, 96*(8). 1342-1346.

Arrindell, W. A., & Ettema, J. H. M. (1986). SCL-90: *Handleiding bij een multidimensionele psychopathologie-indicator* [SCL-90: Manual for a multidimensional psychopathology indicator]. Lisse, The Netherlands: Swets & Zeitlinger.

Ajrouch, K. J. (2007) Resources and well-being among Arab-American elders. *Journal of Cross - Cultural Gerontology, 22*(2): 167-182

Argyle, M. (2001). *The Psychology of happiness* (Ed.). London, UK: Routledge.

Barona, A., Reynolds, C., & Chastain, R. (1984). A demographicly based index of premorbid intelligence for the WAIS-R. *Journal of Consulting and Clinical Psychology, 52,* 885–887.

Barresi, C. M. (1990). Ethnogerontology: Social aging in national, racial, and cultural groups. In K. F. Ferraro (Ed.), *Gerontology, perspectives and issues* (pp. 247- 262). New York: Springer.

Bayani, A. S., Koocheki, A. M., & Goodarzi, H. (2007). The reliability and validity of Satisfaction with Life Scale. *Journal of Iranian Psychologists, 3,* 259-267.

Berry, J.W. (1980). Acculturation as verities of adaptation. In A. M. Padilla (Ed.), Acculturation: *Theory, models and some new findings* (pp. 9-26). Boulder: Westview.

Berry, J. W. (1989). Psychology of acculturation. In J. Berman (Ed.) *Nebraska symposium on motivation* (Vol. 37, pp. 201-234). Lincoln, NE: University of Nebraska Press.

Berry, J. W. (1999). International relations in plural societies. *Canadian Psychology, 40,* 12-21.

Berry, J. W. (2002). Conceptual approaches to acculturation In K. Chun, P. Organista & G. Marin (Eds). *Acculturation advances in theory, measurement, and applied research* (pp. 17-37), Washington, DC: American Psychological Association.

Berry, J. W., & Kim, U. (1988). Acculturation and mental health. In P. R. Dasen, J. W. Berry, & N. Sartorius (Eds.), *Health and cross-cultural psychology* (pp. 207- 236). London: Sage.

Bertera, E. M., Bertera, R. L., & Shankar, S. (2003). Acculturation, socioeconomic factors and obesity among immigrants from El Salvador living in the Washington, D.C. area. *Journal of Ethnic and Cultural Diversity in Social Work, 12(2),* 43-59.

Blais, M.R., Vallerand, R.J., Pelletier, L.G., & Brière, N.M. (1989). L'Echelle de satisfaction de vie: Validation Canadienne-Francaise du 'Satisfaction With Life Scale' [French-CanadianValidation of the Satisfaction With Life Scale]. *Canadian Journal of Behavioral Science, 21,* 210–223.

Burr, J. A. & Mutchler, J. E. (2003). English language skills, ethnic concentration, and And household composition: Older Mexican immigrants. *Journals of Gerontology: Series B: Psychological Sciences & Social Sciences, 58B*(2), S83- S92.

Centre for Addiction and Mental Health (CAMH). (2007). The results of the Iranian community forum and needs assessment administered in March 2007. Centre for Addiction and Mental Health. Retrieved July 17, 2009 from the World Wide Web: http://www.camh.net/News_events/CAMH_Events/CAMH_Iranian_Report_Final_SM.pdf.

Casado, B. L. & Leung, P. (2001). Migratory grief and depression among elderly Chinese American immigrants. *Journal of Gerontological Social Work. Special Issue: Social work with the Asian American elderly, 36,* 5-26.

Chang, T., Tracey, T. J. G., & Moore, T. L. (2005). The dimensional structure of Asian American acculturation: an examination of prototypes. *Self and Identity, 4,* 25-43.

Chia, A. L., & Costigan, C. L. (2006). Understanding multidimensionality of acculturation among Chinese-Canadian. *Canadian Journal of Behavioural Science,* 38(4), 311-324.

Chow, H.P. (2010). Growing old in Canada: physical and psychological well-being among elderly Chinese immigrants. *Ethnic Health, 15*(1), 61-72

Citizenship and Immigration Canada (2009). Sponsoring your family. Retrieved Oct 17, 2009 from the World Wide Web: http://www.cic.gc.ca/english/immigrate/sponsor/index.asp

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlational analysis for the behavioural sciences* (3rd Ed.). Mahwah, NJ: Lawrence Erlbaum.

Crespo, C. J., Smit, E., Carter-Pokras, O., & Anderson, R. (2001). Acculturation and leisure-time physical activity in Mexican American adults. *American Journal of Public Health, 91*(8), 1254-1258.

Dejman, M., Setareh Forouzan, A., Assari, S., Rasoulian, M., Jazayeri, A.,Malekafzali, H., Baradaran Eftekhari, M., Falahat, K., Ekbald, S. (2010). How Iranian lay people in three ethnic groups conceptualize a case of a depressed woman: an explanatory model, *Ethnicity & Health (15)*5, 475 – 493.

Diener, E., Emmons, R. E., Larsen, R. J., & Griffin, S. (1985). Satisfaction with Life Scale. *Journal of Personality Assessment,49,* 71-75.

Espino, D. V., Lichtenstein, M. D., Palmer, L. F., et al. (2001). Ethnic differences in Mini Mental State Examination (MMSE) scores: where you live makes a difference. *Journal of American Geriatric Society, 49,* 538-548.

Fact book on Aging in British Columbia (2009). Wister. A. V., Sixsmith, A., Adams, R. & Sinden, D. (Eds.).Simon Fraser University, Gerontology Research Centre.

Foroughi, E., Misajon, R. & Cummins, R. A. (2001).The relationship between migration, social support, and social integration on quality of life. *Behaviour Change, 18*(3), 156-167.

Gelfand, D. (2003). Aging and ethnicity: Knowledge and services (Eds). New York: Springer Publishing Company.

Ghaffarian, S.(1998). The acculturation of Iranian immigrants in the United States and the implications for mental health. *The Journal of Social Psychology, 138*(5), 645-654.

Gonzalez, H. M., Haan, M. N., & Hinton, L. (2001). Acculturation and prevalence of depression in older Mexican American: Baseline results of the Sacramento area Latino study on aging. *Journal of American Geriatric Society, 49,* 948-953.

Greenland, K., & Brown, R. (2005). Acculturation and contact in Japanese students studying in the United Kingdom. *The Journal of Social Psychology, 145,* 373-389.

Hamrahan, Iranian Seniors Support Program.(2010). Retrieved March 11, 2009 from the World Wide Web: http://immigrantguide.ca/programs/hamrahan-iranian-seniors-support-program

Hazuda, H. P., Haffner, S. M., & Stern, M. P. et al. (1988). Effects of acculturation and socioeconomic status on obesity and diabetes in Mexican American. *American Journal of Epidemiology, 128,* 1289-1301.

Jafari, S., Baharlou, S., & Mathias, R. (2010). Knowledge of determinants of mental health among Iranian immigrants of BC, Canada: ‘‘A qualitative study’’, *Journal of Immigrant Minority Health, 12,* 100–106

Jang, Y., Kim, G., & Chiriboga, D. (2005). Acculturation and manifestation of depressive symptoms among Korean-American older adults. *Aging & Mental Health,9,* 500-507.

Kirkcaldy, B. D., Furnham, A. F., & Siefen, R. G. (2009). The effects of gender and Migrant status on physical and psychological well-being, *International Journal of Adolescent Medicine and Health. 21* (1), 61–72.

Lai, D. W. & Leonenko, W. L. (2007). Correlates of living alone among single elderly Chinese immigrants in Canada. *International Journal of Aging & Human Development, 65*(2), 121-148.

Lai, D. W. & Surood, S. (2008). Socio-cultural variations in depressive symptoms of ageing South Asian Canadians, *Asian Journal of Gerontology & Geriatrics, 3,* 84–91.

Lam, R. E., Pacala, J. T., & Smith S. L. (1997). Factors related to depressive symptoms in an elderly Chinese American sample. *Clinical Gerontologist, 17,* 57-70.

Leu, J., Walton, E., & Takeuchi, D. (2010). Contextualizing acculturation: gender, family, and community reception influences on Asian immigrant mental health, *American Journal of Community Psychology,* Published online: DOI: 10.1007/s10464-010-9360-7

Lum T. Y. & Vanderaa, J.P. (2009). Health disparities among immigrants and non-immigrants elders: the association of acculturation and education. *Journal of Immigrant Minority Health* Doi 10.1007/s10903-008-9225-4.

McConatha, J. T., Stoller, P. & Oboudiat, F. (2001). Reflections of older Iranian women adapting to life in the United States. *Journal of Aging Studies,15,* 389-381.

Meyler, D., Stimpson, J. P., & Peek, M. K. (2006). Acculturations and self-esteem among older Mexican American. *Aging & Mental Health, 10,* 182-186.

Moallem, M. (1999). Multicultural Canada, Retrieved October, 13, 2009 from World Wide Web from: http://www.multiculturalcanada.ca/Encyclopedia/A-Z/i6/2

Moreno-John, G., Gachie, A., Fleming, C.M., Nápoles-Springer, A., Mutran, E., Manson, S.M., & Pérez-Stable, E. J. (2004). Ethnic minority older adults participating in clinical research: developing trust. *Journal of Aging & Health. 16*, 93S-123S.

Mui, A. C., & Suk-Young, K. (2006). Acculturation stress and depression among Asian immigrant Elder, *Social Work, 51*(3), 243-255.

Myers, H., & Rodriguez, N. (2003). Acculturation and physical health in racial and ethnic minorities. In K. M. Chun, P.B. Organista & G. Marin (Eds.), Acculturation: Advances in theory, measurement and applied research (pp. 163-185). Washington, DC: American Psychological Association.

National Institute of mental Health. (2011). What is Depression? Retrieved March 29, 2011 from the World Wide Web: http://www.nimh.nih.gov/health/publications/women-and-depression-discovering-hope/what-is-depression.shtml

Newbold, K.B., & Filice, J. (2006). Health status of older immigrants to Canada. *Canadian Journal on Aging, 25*(3): 305-319.

O'Rourke, N., Cappeliez, P., & Neufeld, E. (2007). Recurrent depressive symptomatology and physical health: A 10-year study of informal caregivers of persons with dementia. *Canadian Journal of Psychiatry 52*(7), 434-441.

O'Rourke, N., Hatcher, L., & Stepanski, E. J. (2006). A Step-by-Step approach to using SAS for univariate and multivariate statistics (Eds.), SAS Press and John Wiley Sons Inc.

Padilla,A. M., & Perez, W. (2003). Acculturation, social Identity, and social cognition: A new perspective. *Hispanic Journal of Behavioural Sciences, 25,* 35-55.

Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological assessment, 5,* 164-172.

Pons, D., Atienza, F. L., Balaguer, I., & Garcia-Merita, M. L. (2000). Satisfaction with life Scale: Analysis of factorial invariance for adolescence and elderly persons. *Perceptual & Motor Skills, 91,* 62-68.

Poureslami, I., Rootman, I., & Balka, E. (2007). Assessing the effectiveness of informational video clips on Iranian immigrants' attitudes toward and intention to use the BC Health Guide Program in the Greater Vancouver area. *Medscape General Medicine, 9*(1), 12.

Prus, S. G., Tfaily, R., & Lin, Z. (2010). Comparing racial and immigrant health status and health care access in later life in Canada and the United States. *Canadian* Journal of Aging, 29(3), 383-395.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1,* 385-401.

Radloff, L. S., & Locke, B. Z. (2000). Center for Epidemiologic Studies Depression Scale. In A. J. Rush, et al. (Eds.), *Handbook of Psychiatric Measures* (pp: 523– 526).Washington, DC: American Psychiatric Association

Roberts, R. E., Vernon, S.W., & Rhodes, H. M. (1989). Effects of language and ethnic Status on reliability and validity of Centre for Epidemiologic Studies-Depression Scale with psychiatric patients. *The Journal of Nervous and Mental Disease, 177*(10), 581-592.

Rudmin, F. W. (2009). Acculturation, acculturative change, and assimilation: A research bibliography with URL links. Retrieved July 17, 2009 from the World Wide Web: http://ispp.org/bibliographies/RudminAccultBiblio2009Jan24.pdf

Sadavoy, J., Meier, R. & Yuk Mui Ong, A. (2004). Barriers to access to mental health services for ethnic seniors: The Toronto study. *Canadian Journal of Psychiatry 49,* 192-199.

Sadeghirad, b., Haghdoost, A. A., Amin-Esmaeili, M., Shahsavand Ananloo, E., Ghaeli, P., Rahimi-Movaghar, A., Talebian, E., Pourkhandani, A., Noorbala, A. A., Barooti, E. (2010). Epidemiology of major depressive disorder in Iran: A A systematic review and meta-Analysis. *International Journal of Preventive Medicine, 1*(2), 81-91.

Sahami Martin, S. (2009). Healthcare-seeking behaviours of older Iranian immigrants: Health perceptions and definitions. Journal of Evidence-Based Social Work, 6, 58-78.

Sajjadi, M., Kooshyar, H., Vaghei, S., & Esmaeeli, S. (2008). The effect of self-care education on depression in patients undergoing hemodialysis. *Scientific Journal of Medical Sciences of Birjand University,1,* 34-40.

Schwartz, S. J., Unger,J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: implications for theory and research, *American Psychologist, 65,*(4): 237-251.

Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations, 14,* 449–464.

Shahim, S. (2007). Psychometrics of the Iranian acculturation scale. *Psychological Reports, 101:* 55-60.

Shahim, S. (2007). Family acculturation, behavior problems, and social skills of a group of Iranian immigrant children in Toronto. *Psychological Research, 10,* 93-108.

Shakeri Shemirani, F. & O'Conner, D. L. (2006). Aging in a foreign country: Voices of Iranian women aging in Canada. *Journal of Women & Aging, 18*(2): 73-80.

Shaterly, S. M., Baxter J,. Mason, L.D., & Hamman, R. F. (1996). Self-rated health among Hispanic vs. non-Hispanic white adults: the San Luis Valley Health and Aging Study. *American Journal of Public health, 86*(12): 1798 -1801.

Shim, Y. R., & Schwartz, R. C. (2008). Degree of acculturation and adherence to Asianvalues as correlates of psychological distress among Korean immigrants. *Journal of Mental Healt, 17(6):* 607-617.

Simpao, M. P., Espino, D. V., Palmer, R. F., Lichtenstein, M. J., & Hazuda, H. P. (2005).Association between acculturation and structural assimilation and Mini-Mental State examination-assessed cognitive impairment in older Mexican Americans: findings from the San Antonio longitudinal study of aging. *Journal of American Geriatric Society, 53,* 1234-1239.

Statistics Canada (2009). Retrieved October 13, 2009 from World Wide Web: http://www.cic.gc.ca/english/resources/statistics/facts2008/permanent/10.asp

Statistics Canada (2006). A portrait of seniors in Canada, Catalogue No. 89-519.

Statistics Canada (2001). Retrieved July, 3, 2009 from World Wide Web: http://www40.statcan.ca/l01/cst01/demo27x- eng.htm

Streiner, D. L., Cairney, J., & Veldhuizen, S. (2006). The epidemiology of psychological problems in elderly, *Canadian Journal of Psychiatry, 52,* 185-191.

Sue, D. W., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice* (4th ed.). New York: Wiley.

Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian self-identity acculturation scale: an initial report. *Educational and Psychological Measurement, 47,* 401-407.

Sundquist J., & Winkleby M. (2000). Country of birth, acculturation status and abdominal obesity in a national sample of Mexican American women and men. *International Journal of Epidemiology, 29*, 470-477.

Tran, T. V., Sung, T., & Huynh-Hohnbaum, A. L. T. (2008). A measure of English acculturation stress and its relationships with psychological and physical health status in a sample of elderly Russian immigrants, *Journal of Gerontological Social Work, 50*(3/4), 37-50.

Tsytsarev, S. V. & Krichmar, L. (2000). Relationship of perceived cultural shock, length of stay in US, depression, and self esteem in elderly Russian speaking Immigrants. *Journal of Social Distress and Homeless, 9*, 35-49.

Tucker, K.L., Bermudez, I. O. & Castaneda, C. (2000). Type 2 diabetes is prevalent and poorly controlled among Hispanic elders of Caribbean origin, *American Journal of Pulic Health, 90*(8), 1288-1293.

Wiking, E., Johansson, S.E., & Sundquist J. (2004). Ethnicity, acculturation, and self reported health. A population based study among immigrants from Poland, Turkey, and Iran in Sweden. *Journal of Epidemiological Community Health, 58,* 574-582.

Wu, C. H., Chen, L. H., & Tsai, Y. M. (2009). Longitudinal invariance analysis of the satisfaction with life scale. *Personality and Individual Differences, 45,*136-401.

Wu, Z., & Hart, R. (2002). Social and Health factors associated with support among elderly immigrants in Canada. *Research on Aging, 24*, 391-412.

Yamada, A. M., Valle, R., Barrio, C. & Jeste, D. (2006). Selecting an acculturation measure for use with Latino older adults. *Research on Aging, 28*(5): 519-561.

Yoon, E., Lee, R., & Goh, M. (2008). Acculturation, social connectedness, and subjective well being. *Cultural Diversity and Ethnic Minority Psychology,*

Appendices

Appendix A: Letters

Administrators Letter

Department of Gerontology

515 West Hastings Street
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V6B 5K3

Tel: 778.782.5062
Fax: 778.782.5066

e-mail: [redacted]

www.sfu.ca/gerontology

Dear Facility Administrator:

My name is Amir Moztarzadeh and I am a graduate student at Simon Fraser University working under the supervision of Dr. Norm O'Rourke ([redacted]; Department of Gerontology). I will soon begin data collection for my master's thesis and would greatly appreciate your assistance recruiting participants for this study.

This thesis will examine acculturation as a predictor of the well-being of older Iranian immigrants. Participants need to be: 50+ years of age; born in Iran; and able to read Farsi. They will be asked to complete standardized instruments and to provide demographic and immigration-related information. I hope to recruit a sample size of approximately110 older Persian immigrants before the end of the calendar year.

Participants will ***not*** be asked identifying information; their anonymity will be maintained. I will provide a secure box in which to deposit completed questionnaires for this facility. A summary of study findings will be available to participants following completion of this thesis.

I will contact you by phone roughly a week later to provide any additional information or clarification – and to ask for your assistance.

With regards,

Amir Moztarzadeh
Master's Candidate
Department of Gerontology

Information Letter

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Were you born in Iran? Are you over 50 years of age? If so, your participation in the following university-based research study would be greatly appreciated!

The following pages ask questions regarding your well-being, adjustment to life in Canada and descriptive information (e.g., age, physical health). It is our hope that this information will provide us with greater understanding of the experience of Persian immigrants living in Canada. This study is being conducted as a master's thesis under the supervision of Dr. Norm O'Rourke.

Completion of this set of questionnaires will require about 30 minutes of your time. Please deposit the completed questionnaire in the secure box specifically for this study at this facility's reception. A summary of findings will be available at reception upon study completion.

You are not required to provide your name. No individual responses from this study will be disclosed; only combined data will be reported. If you have any concerns regarding this study, please contact Dr. Hal Weinberg (Hal_Weinberg@sfu.ca; Director, SFU Office of Research Ethics. Should you have concerns about your rights as a research participant, you may contact the Office of Research Ethics at (778) 782-6593.

This information will be used only for research purposes. Responses will be kept in a password protected computer database. Completion of these questionnaires will be seen as agreement to take part in this study.

Participation in this study is strictly voluntary. You are not required to answer questions that make you uncomfortable and you are free to discontinue at any time.

Thank you for taking the time to consider participating in this study. Please retain a copy of this form for your records.

With regards,

Amir Moztarzadeh
Master's Candidate
Department of Gerontology

SIMON FRASER UNIVERSITY THINKING OF THE WORLD

Appendix B: Study Measures
(English Translations followed by Farsi)

English Translations

Iranian Acculturation Scale

1. In what language do you usually think?	
A: Only Farsi (Persian)	1
B: More often Farsi (Persian)	2
C: Both English & Farsi (Persian)	3
D: More often English	4
E: Only English	5
2. When did you read a book in Farsi (Persian)?	
A: During the last 30 days	1
B: During the last 6 months	2
C: During the last year	3
D: More than a year ago	4
E: I never read in Farsi (Persian)	5
3. When did you read a newspaper (or Internet news) in Farsi (Persian)?	1
A: During the last 7 days	2
B: During the last 30 days	3
C: During the last year	4
D : More than a year ago	5
E : I never read in Farsi (Persian)	
4. When did you watch Iranian TV or Video, or listen to radio in Farsi?	1
A: During the last 7 days	2
B: During the last 30 days	3
C: During the last year	4
D: More than a year ago	5
E : I never Watch Iranian TV or Video, or listen to radio in Farsi (Persian)	
5. When did you listen to Persian music?	
A: During the last 7 days	1
B: During the last 30 days	2
C: During the last year	3
D: More than a year ago	4

6. What type of food do you eat more often?	
A: More often Iranian	1
B: Iranian more than Non-Iranian	2
C: Iranian and Non-Iranian to the same level	3
D: Non-Iranian more than Iranian	4
E: More often Non-Iranian	5
7. How important is it that the Iranian tradition be followed?	
A: Is very Important	1
B: Is somewhat important	2
C: Is not very important	3
D: Is not important at all	4
8. How often do you attend Iranian recreational events?	
A: Once in a month	1
B: Few times in a year	2
C: Rarely	3
D: Never	4
9. How often do you attend Iranian religious events?	
A: Once in a month	1
B: Few times in a year	2
C: Rarely	3
D: Never	4
10. What language do you use to communicate with your spouse?	
A: Only Farsi (Persian)	1
B: More Often Farsi (Persian)	2
C: Both English & Farsi (Persian)	3
D: More Often English	4
E: Only English	5
11. What language do you use to communicate with your children?	
A: Only Farsi (Persian)	1
B: More Often Farsi (Persian)	2
C: Both English & Farsi (Persian)	3
D: More Often English	4
E: Only English	5
12. What language do you use when you speak with your Iranian friends?	
A: Only Farsi (Persian)	1
B: More Often Farsi (Persian)	2
C: Both English & Farsi (Persian)	3
D: More Often English	4
E: Only English	5

13. In what language are your reading skills better?	
A: Farsi (Persian)	1
B: Both English & Farsi (Persian)	2
D: English & other languages	3
E: English	4
14. In what language are your writing skills better?	
A: Farsi (Persian)	1
B: Both English & Farsi (Persian)	2
D: English & other languages	3
E: English	4
15. What ethnic group do you identify with?	
A: Only Iranian nationality	1
B: More with Iranian nationality	2
C: With Iranian & Western nationality equally	3
D: More with Western nationality	4
E: Only Western nationality	5
16. How do you see your future and progress in Canada?	
A: I will not experience any progress	1
B: I will not experience much progress	2
C: I will experience progress	3
D: I will progress very much	4
17. Did you come to Canada to improve the future of your children?	
A: Completely agree	5
B: Agree	4
C: Somewhat agree	3
D: Do Not agree	2
E: Do Not agree at all	1
18. Did you come to Canada to improve your career opportunities?	
A: Completely agree	5
B: Agree	4
C: Somewhat agree	3
D: Do Not agree	2
E: Do Not agree at all	1
19. Marriage of children should be arranged	
A: By parents	1
B: By parents and with agreement of children	2
C: The couples should arrange the marriage themselves	3

20. To what extent do you celebrate holidays such as Christmas? A: Very often B: Somewhat C: Never	 3 2 1
21. Dating of female teenager A: Should be allowed B: Under supervision of parents can be allowed C: Never should be allowed	 3 2 1
22. Association of female teenagers and young adults with the opposite sex A: Should be allowed B: Under supervision of parents can be allowed C: Never should be allowed	 3 2 1
23. Out of ten of your friends, how many are Iranian? A: 1 to 2 persons B: 3 to 5 persons C: 6 to 8 persons D: 9 to 10 persons	 4 3 2 1
24. What is the major consideration in choosing a spouse for your children? A: Similarity of religion B: Similarity of nationality C: Similarity of religion and nationality are equally important D: Individuals should be opt (regardless of their religions and nationalities)	 1 2 3 4
25. Dating of male teenagers A: Should be allowed B: Under supervision of parents can be allowed C: Never should be allowed	 3 2 1
26. Association of male teenagers and young adults with the opposite sex A: Should be allowed B: Under supervision of parents can be allowed C: Never should be allowed	 3 2 1

Satisfaction with Life Scale

Please indicate your agreement by selecting the appropriate response from the following response key:

1 Strongly Disagree
2 Disagree
3 Slightly Disagree
4 Neutral
5 Slightly Agree
6 Agree
7 Strongly Agree

1. In most ways my life is close to ideal	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2. The conditions of my life are excellent	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3. I am satisfied with my life	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4. So far I have gotten the important things I wanted in life	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5. If I could live my life over, I would change almost nothing	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Center for Epidemiological Studies Depression Scale (CES-D)

Now, I'd like to know how you have been feeling. For each of the following statements, please indicate how often you felt this way **during the past week** using the response key above.

1	**2**	**3**	**4**
Rarely or none (< 1 day)	Some (1-2 days)	Occasionally (3-4 days)	Most (5-7 days)

1.	I was bothered by things that don't usually bother me	**1**	**2**	**3**	**4**
2.	I did not feel like eating; my appetite was poor	**1**	**2**	**3**	**4**
3.	I felt that I could not shake off the blues even with help from my family or friends	**1**	**2**	**3**	**4**
4.	I felt that I was just as good as other people	**1**	**2**	**3**	**4**
5.	I had trouble keeping my mind on what I was doing	**1**	**2**	**3**	**4**
6.	I felt depressed	**1**	**2**	**3**	**4**
7.	I felt that everything I did was an effort	**1**	**2**	**3**	**4**
8.	I felt hopeful about the future	**1**	**2**	**3**	**4**
9.	I thought my life had been a failure	**1**	**2**	**3**	**4**
10.	I felt fearful	**1**	**2**	**3**	**4**
11.	My sleep was restless	**1**	**2**	**3**	**4**
12.	I was happy	**1**	**2**	**3**	**4**
13.	I talked less than usual	**1**	**2**	**3**	**4**
14.	I felt lonely	**1**	**2**	**3**	**4**
15.	People were unfriendly	**1**	**2**	**3**	**4**
16.	I enjoyed life	**1**	**2**	**3**	**4**
17.	I had crying spells	**1**	**2**	**3**	**4**
18.	I felt sad	**1**	**2**	**3**	**4**
19.	I felt that people dislike me	**1**	**2**	**3**	**4**
20.	I could not *get going*	**1**	**2**	**3**	**4**

Demographics Questionnaire

1. What is your gender (Male, Female)? _____

2. Date of birth (Western calendar)? Day _____ Month _____ Year _____

3. What year did you leave Iran? _____

4. What year did you arrive in Canada? _____

5. How many years of formal education did you complete? _____

6. What was your work or occupation in Iran (e.g., housewife, carpenter)?
   _____

7. What is/was your work or occupation in Canada (If it's applicable to you):
   _____

   7a. If applicable, were you able to work in your chosen field or profession (e.g., field in which you were trained): **Yes** **No**
   If not, please describe _____
   _____
   _____

8. Please indicate your **current** residency status in Canada:

   A: Refugee
   B: Landed immigrant
   C: Canadian Citizen
   D: Family sponsorship
   E: Other; specify _____

9. Do you live with relatives (e.g., son or daughter, siblings) in the same household? (Circle one):
   Yes **No**

10. The decision to leave Iran was (select one):

    A: voluntary (e.g., better opportunities in life for me and my family)
    B: involuntary (e.g., personal safety)

    Please describe _____
    _____

11. What is your religious affiliation, if any (please circle one):

A: Shiite Muslim
B: Sunni Muslim
C: Baha'i
D: Zoroastrian
E: None
F: Other; specify _____

12. To what degree do you agree with the following two statements?

a) I have experienced ***overt*** discrimination as an immigrant in Canada (e.g., racial slurs, nasty looks)

A: Strongly agree
B: Somewhat agree
C: Agree
D: Somewhat disagree
E: Strongly disagree

b) I have experienced ***subtle*** discrimination as an immigrant in Canada (e.g., denied promotion at work without adequate explanation)

A: Strongly agree
B: Somewhat agree
C: Agree
D: Somewhat disagree
E: Strongly disagree

13. With which ethnic group(s) do you socially interact most often? (select *one*):

A: Only Iranian
B: Most often Iranian
C: Both Canadian and Iranian
D: Most often Canadian
E: Only Canadian

14. How would you describe your health these days (circle *one* response)?

- Very poor
- Somewhat poor
- Poor
- Satisfactory
- Good
- Very Good
- Excellent

15. Is your health better now, about the same, or worse than a year ago (circle *one* response)?

- Better
- About the same
- Worse

16. Would you say your health is better, about the same, or worse than most people your age
(circle *one* response)?

- Better
- About the same
- Worse

17. How much do health troubles stand in the way of doing the things you want to do (circle *one* response)?

- Not at all
- A little (some things)
- A great deal

18. Regarding your health over the past year, do you have, or have had any of the following conditions. Please respond either *Yes* or *No* as appropriate:

Allergies of any kind	**Yes**	**No**
Broken hip	**Yes**	**No**
Fractures or broken bones (not hip)	**Yes**	**No**
Hip replacement	**Yes**	**No**
Breathing problems (e.g., asthma, TB, emphysema, pneumonia, bronchitis)	**Yes**	**No**
Heart or circulation problems (e.g., heart trouble angina, hardening of the arteries)	**Yes**	**No**
Pace maker inserted	**Yes**	**No**
High blood pressure	**Yes**	**No**
Paralysis of any kind	**Yes**	**No**
Kidney condition or disease (including bladder troubles)	**Yes**	**No**
Thyroid disease	**Yes**	**No**
Surgery	**Yes**	**No**
Tumour or cancer	**Yes**	**No**
Diabetes	**Yes**	**No**
Troubles with vision (e.g., cataracts, glaucoma)	**Yes**	**No**
Problems with hearing	**Yes**	**No**
Arthritis or rheumatism	**Yes**	**No**
Troubles with your stomach or digestive problems	**Yes**	**No**
Stroke or effects of a stroke	**Yes**	**No**
Parkinson's disease	**Yes**	**No**
Nervous or been tense	**Yes**	**No**
Trouble getting to, or staying asleep	**Yes**	**No**
Other problem(s) not mentioned Specify _____	**Yes**	**No**

19. Have you accessed (to tried to access) mental health services in Canada?

Yes **No**

If yes, please describe _____

_____

20. Please describe factors specific to your experiences (both positive and/or negative) of adapting to life in Canada that you feel are important _____

_____

_____

_____

_____

Thank you for taking the time to participate in this study! Please deposit your completed questionnaires in the box at reception of this facility.

Persian (Farsi) Instruments

نمره گذاري مقياس فرهنگ پذيري ايرانيان

	1-به چه زباني معمولاً فكر مي كنيد؟
1	الف: فقط فارسي
2	ب: بيشتر فارسي
3	ج: انگليسي و فارسي، هر دو
4	د: بيشتر انگليسي
5	هـ: فقط انگليسي
	2-آخرين مرتبه كه كتابي را به فارسي خوانديد كي بود؟
1	الف: در سي روز گذشته
2	ب: در شش ماه گذشته
3	ج: در يك سال گذشته
4	د: بيشتر از يك سال پيش
5	هـ : هرگز به فارسي نمي خوانم
	3-آخرين مرتبه كه روزنامه يا اخبار اينترنت را به فارسي خوانديد كي بود؟
1	الف: در هفت روز گذشته
2	ب: در سي روز گذشته
3	ج: در يك سال گذشته
4	د: بيشتر از يك سال پيش
5	هـ : هرگز به فارسي نمي خوانم
	4-آخرين مرتبه كه تلويزيون و ويدئو فارسي تماشا كرديد و يا راديو فارسي گوش كرديد كي بود؟
1	الف: در هفت روز گذشته
2	ب: در سي روز گذشته
3	ج: در يك سال گذشته
4	د: بيشتر از يك سال پيش
5	هـ : هرگز تلويزيون فارسي تماشا نمي كنم و راديو فارسي گوش نمي كنم.
	5-آخرين مرتبه كه موسيقي ايراني گوش كرديد كي بود؟
1	الف: در هفت روز گذشته
2	ب: در سي روز گذشته
3	ج: در يك سال گذشته
4	د: بيشتر از يك سال گذشته
	6-چه نوع غذائي را بيشتر مي خوريد؟
1	الف: بيشتر ايراني
2	ب: ايراني بيشتر از غير ايراني
3	ج: ايراني و غير ايراني به يك ميزان
4	د: غير ايراني بيشتر از ايراني
5	هـ : بيشتر غير ايراني

7-پيروي از سنت هاي ايراني براي شما تا چه حد مهم است الف: خيلي مهم است. ب: تا حدي مهم است. ج: خيلي مهم نيست. د: اصلاً مهم نيست.	1 2 3 4
8-چقدر به تفريح و سرگرمي هاي ايراني مي رويد؟ الف: ماهي يك بار ب: چندبار در سال ج: به ندرت د: هرگز	1 2 3 4
9-چقدر به مراسم مذهبي ايراني مي رويد؟ الف: ماهي يك بار ب: چند بار در سال ج: به ندرت د: هرگز	1 2 3 4
10- به چه زباني با همسر خود در منزل صحبت مي كنيد (اگر در مورد شما صدق مي كند) الف: فقط فارسي ب: بيشتر فارسي ج: انگليسي و فارسي ، هر دو د: بيشتر انگليسي هـ : فقط انگليسي	1 2 3 4 5
11- به چه زباني با فرزندانتان صحبت مي كنيد؟ (اگر در مورد شما صدق مي كند). الف: فقط فارسي ب: بيشتر فارسي ج: انگليسي و فارسي، هر دو د: بيشتر انگليسي هـ : فقط انگليسي	1 2 3 4 5
12-به چه زباني با دوستان ايراني خود صحبت مي كنيد؟ الف: فقط فارسي ب: بيشتر فارسي ج: انگليسي و فارسي، هر دو د: بيشتر انگليسي هـ : فقط انگليسي	1 2 3 4 5
13-به چه زباني مهارت خواندن شما بهتر است؟ الف: فارسي ب: انگليسي و فارسي، هر دو ج: انگليسي و زبان هاي ديگر د: انگليسي	1 2 3 4

14-به چه زباني مهارت نوشتن شما بهتر است؟ الف: فارسي ب: انگليسي و فارسي هر دو ج: انگليسي و زبان هاي ديگر د: انگليسي	1 2 3 4
15-با چه مليتي بيشتر شبيه سازي مي كنيد؟ الف: فقط با مليت ايراني ب: بيشتر با مليت ايراني ج: با مليت ايراني و غربي بطور مساوي د: بيشتر با مليت غربي هـ: فقط با مليت غربي	1 2 3 4 5
16- آينده و پيشرفت خود را در كشور ..... كانادا..... چگونه مي بينيد. الف: هيچ پيشرفتي نمي كنم. ب: خيلي پيشرفت نمي كنم. ج: پيشرفت مي كنم. د: خيلي پيشرفت مي كنم.	1 2 3 4
17-ما به كشور..... كانادا..... آمديم تا آينده فرزندانمان را بهبود بخشيم (اگر در مورد شما صدق مي كند) الف: كاملاً موافقم ب: موافقم ج: تا حدودي موافقم د: تا حدودي موافق نيستم هـ : موافق نيستم	5 4 3 2 1
18-ما به كشور ..... كانادا..... آمديم تا آينده و امكانات شغلي خود را بهبود بخشيم. الف: كاملاً موافقم ب: موافقم ج: تا حدودي موافقم د: تا حدودي موافق نيستم هـ : موافق نيستم	5 4 3 2 1
19- ازدواج فرزندان الف: بايد توسط والدين ترتيب داده شود. ب: بايد توسط والدين با موافقت فرزندان ترتيب داده شود. ج: زوجين بايد خود ازدواج را ترتيب دهند.	1 2 3

20-تا چه حد اعياد كريسمس، عيد پاك و روز شكرگزاري را جشن مي گيريد؟ الف: تا حد زياد ب: تا حدودي ج: هرگز	3 2 1
21- بيرون رفتن دختران نوجوان با پسران الف: بايد مجاز باشد ب: بايد تحت نظارت مجاز باشد ج: نبايد مجاز باشد	3 2 1
22-رابطه دختران نوجوان و جوان با جنس مخالف الف: بايد مجاز باشد ب: بايد تحت نظارت مجاز باشد ج: نبايد مجاز باشد	3 2 1
23-از 10 نفر دوست شما چند نفر ايراني هستند. الف: 1 تا 2 نفر ب: 3 تا 5 نفر ج: 6 تا 8 نفر د: 9 تا 10 نفر	4 3 2 1
24-در انتخاب همسر براي فرزندانتان مهمترين دغدغه خاطر الف: مذهب يكسان است ب: مليت يكسان است ج: مذهب و مليت يكسان است. د: فرد مناسب است.	1 2 3 4
25- بيرون رفتن پسران نوجوان با دختران الف: بايد مجاز باشد ب: بايد تحت نظارت مجاز باشد د: نبايد مجاز باشد	3 2 1
26-رابطه پسران نوجوان و جوان با جنس مخالف الف: بايد مجاز باشد ب: بايد تحت نظارت مجاز باشد د: نبايد مجاز باشد	3 2 1

در ذيل 5 جمله وجود دارد كه ممكن است با آن موافق يا مخالف باشيد ، در انتخاب پاسخ صادق و راحت باشيد . نيازي به ذكر نام و نام خانوادگي نيست.

1- زندگي ام در بيشتر موارد به زندگي دلخواه من ، نزديك است.

- o بشدت مخالفم
- o مخالفم
- o كمي مخالفم
- o نه مخالفم و نه موافقم
- o كمي موافقم
- o موافقم
- o بشدت موافقم

2- شرايط زندگي ام عالي است.

- o بشدت مخالفم
- o مخالفم
- o كمي مخالفم
- o نه مخالفم و نه موافقم
- o كمي موافقم
- o موافقم
- o بشدت موافقم

3- از زندگي ام راضي ام.

- o بشدت مخالفم
- o مخالفم
- o كمي مخالفم
- o نه مخالفم و نه موافقم
- o كمي موافقم
- o موافقم
- o بشدت موافقم

4- تا كنون به چيزهاي با اهميتي كه در زندگي مي خواستم ، رسيده ام .

- o بشدت مخالفم
- o مخالفم
- o كمي مخالفم
- o نه مخالفم و نه موافقم
- o كمي موافقم
- o موافقم
- o بشدت موافقم

5- اگر عمري باقي باشد ، تقريباً چيزي را تغيير نخواهم داد.

- o بشدت مخالفم
- o مخالفم
- o كمي مخالفم
- o نه مخالفم و نه موافقم
- o كمي موافقم
- o موافقم
- o بشدت موافقم

در پرسشنامه زیر مواردی را که ممکن است در یک هفته گذشته، احساس کرده یا رفتار کرده باشید لیست شده اند. لطفا بادقت موارد را بخوانید و پاسخی را که به بهترین وجه احساس یا رفتار شما را بیان می کند در مربع جلوی هر مورد با علامت‌ضربدر(×) مشخص فرمایید.

	هیچ وقت یا بندرت کمتر از 1 روز	برخی اوقات یا تقریباً 1تا 2 روز	گاهی اوقات یا معمولاً 3 تا 4 روز	اغلب اوقات یا همیشه 5 تا 7 روز
1- باچیزهایی که معمولاً باعث آزار و رنجشم نمی شوند ، آزرده و رنجیده می شدم	☐	☐	☐	☐
2-میل به غذا خوردن نداشتم و اشتهایم کم بود	☐	☐	☐	☐
3- احساس می کردم نمی توانم از غصه هایم خلاص شوم حتی با کمک دوستان و خانواده ام	☐	☐	☐	☐
4- احساس می کردم من نیز مثل سایر افراد خوب و سالم هستم	☐	☐	☐	☐
5- به سختی می توانستم روی کاری که انجام میدهم تمرکز کنم	☐	☐	☐	☐
6- احساس می کردم افسرده هستم	☐	☐	☐	☐

	هیچ وقت یا بندرت کمتر از 1 روز	برخی اوقات یا تقریباً 1تا 2 روز	گاهی اوقات یا معمولاً 3 تا 4 روز	اغلب اوقات یا همیشه 5 تا 7 روز
7- احساس میکردم انجام هر کاری برایم سخت و پر زحمت است	☐	☐	☐	☐
8- نسبت به آینده امیدوار بودم	☐	☐	☐	☐
9- فکر می کردم در زندگی شکست خورده ام	☐	☐	☐	☐
10- ترس شدیدی را احساس می کردم	☐	☐	☐	☐
11- در خوابیدن مشکل داشتم	☐	☐	☐	☐
12- خوشحال بودم	☐	☐	☐	☐
13- کمتر از معمول صحبت می کردم	☐	☐	☐	☐
14- احساس بی کسی و تنهایی داشتم	☐	☐	☐	☐
15- مردم نا مهربان بودند	☐	☐	☐	☐
16- از زندگی لذت می بردم	☐	☐	☐	☐

	هیچ وقت یا بندرت کمتر از 1 روز	برخی اوقات یا تقریباً 1تا 2 روز	گاهی اوقات یا معمولاً 3 تا 4 روز	اغلب اوقات یا همیشه 5 تا 7 روز
17- گاهی اوقات گریه کردم	☐	☐	☐	☐
18- احساس غمگینی داشتم	☐	☐	☐	☐
19- احساس می کردم مردم مرا دوست ندارند	☐	☐	☐	☐
20- احساس می کردم دیگر نمی توانم به این وضع ادامه دهم	☐	☐	☐	☐

پرسشنامه

لطفا به دور هر کدام از پاسخها که در مورد شما صدق می‌کند علامت بگذارید:

۱- جنسیت:

- o **مرد**
- o **زن**

۲-تاریخ تولد به میلادی: ..... (چنانچه نمیدانید لطفا سنّ خود را بنویسید: ..... سال)

۳- در چه سالی ایران را ترک کردید؟ .....

۴- در چه سالی وارد کانادا شدید؟ .....

۵- لطفا مشخص کنید چند سال تحصیلات رسمی داشته اید (مثلا دیپلم :۱۲ سال، لیسانس: ۱۶ سال و غیره...)؟ .....

۶- لطفا شغل خود را در ایران مشخص کنید(مثلا خانه دار، کارمند،...): .....

۷- لطفا شغل خود را در کانادا مشخص کنید(چنانچه در مورد شما صدق می‌کند) : .....

- آیا قادر بوده اید در کانادا در حیطه شغل مربوط به خود مشغول به کار شوید (اگر در مورد شما صدق می‌کند به این پرسش جواب دهید)؟ بله خیر

اگر پاسخ خیر است لطفا در این مورد توضیح دهید:

.....
.....
.....

۸- لطفا وضعیت اقامت خود در کانادا را از میان گزینه‌های زیر انتخاب کنید:

- o **مهاجر**
- o **پناهنده**
- o **دارای تابعیت کانادا**
- o **ضمانت خانواده (اسپنسور)**
- o **موارد دیگر**

۹- آیا در حال حاضر همراه با اقوام نزدیک خود (مثلا فرزندان، خواهر یا برادر،...) زندگی می‌کنید؟

بلی خیر

۱۰- تصمیم شما برای ترک کردن ایران کدام یک از موارد زیر بود؟

الف - اختیاری و داوطلبانه (مثلا یافتن موقعیت های شغلی بهتر برای خود و خانواده)
ب - اجباری و غیر داوطلبانه (مثلا بخاطر حفظ جان)
لطفا توضیح دهید
.....
.....

۱۱- مذهب شما:

- o **شیعه**
- o **سنی**
- o **بهائی**
- o **زرتشتی**
- o **موارد دیگر .....**
- o **هیچکدام**

۱۲- تا چه حدعبارات زیر در مورد شما صدق می‌کند:
الف- " من به عنوان یک مهاجر کانادا در این کشور با تبعیض نژادی مستقیم و آشکاری مواجه شدم (مثلا، توهین نژادی) "

- o **کاملا موافقم**
- o **تا حدودی موافقم**
- o **موافقم**
- o **تا حدودی موافق نیستم**
- o **اصلا موافق نیستم**

ب- " من به عنوان یک مهاجر کانادا در این کشور با تبعیض نژادی خفیف و جزئی مواجه شدم (مثلا، محرومیت از ترفیع شغلی) "

- o **کاملا موافقم**
- o **تا حدودی موافقم**
- o **موافقم**
- o **تا حدودی موافق نیستم**
- o **اصلا موافق نیستم**

۱۳- با کدام گروه از گروه‌های زیر بیشتر از همه معاشرت می‌کنید؟

- o **فقط ایرانیها**
- o **بیشتر ایرانیها**
- o **هم ایرانیها و هم کاناداییها**
- o **بیشتر کاناداییها**
- o **فقط کاناداییها**

۱۴- وضعیت سلامتی خود را چگونه ارزیابی می‌کنید؟

- o **بسیار بد**
- o **تا حدی بد**
- o **بد**
- o **رضایتبخش**
- o **خوب**
- o **بسیار خوب**
- o **عالی**

۱۵ - آیا وضعیت سلامتی شما نسبت به سال گذشته:

- o **بهتر است**
- o **مانند سال قبل است**
- o **از سال گذشته بدتر است**

۱۶- آیا معتقد هستید سلامت شما نسبت به افراد هم سنّ شما :

- o **بهتر است**
- o **مانند بقیه است**
- o **بدتر است**

۱۷- تا چه حد مشکلات سلامتی و بهداشت شما در انجام کارهایتان ممانعت ایجاد می‌کند؟

- o **اصلا**
- o **کمی**
- o **به مقدار زیاد**

۱۸-آیا هیچ کدام از مشکلات سلامتی زیر را در حال حاضر یا در سال گذشته تجربه کرده اید؟ لطفا با پاسخ بله یا خیر مشخص کنید:

حساسیت (آلرژی) از هر نوع	بله	خیر
شکستگی لگن	بله	خیر
تعویض لگن	بله	خیر
مشکلات تنفسی (مثل آسم، ذات الریه، برونشیت،..)	بله	خیر
مشکلات قلبی یا مشکلات گردش خون(مثل ناراحتی قلبی، آنژین، سخت شدن دیواره رگ ها،...)	بله	خیر
پیس میکر در قلب تعبیه شده است	بله	خیر
فشار خون بالا	بله	خیر
فلج از هر نوع	بله	خیر
مشکلات یا بیماریهای کلیه (شامل ناراحتی‌های مثانه)	بله	خیر
اختلالات تیروئید	بله	خیر
عمل جراحی	بله	خیر
سرطان و تومور	بله	خیر
مرض قند (دیابت)	بله	خیر
مشکلات چشم و بینایی(مثل آب مروارید، آب سیاه،..)	بله	خیر
مشکلات شنوایی	بله	خیر
آرتروز	بله	خیر
مشکلات گوارشی و معده	بله	خیر
سکته مغزی یا عوارض ناشی از آن	بله	خیر
پارکینسون	بله	خیر
عصبی و مضطرب بودن	بله	خیر
مشکلات خواب	بله	خیر

سایر مشکلات:

لطفا مشخص نمایید:

۱۹- آیا تا بحال به خدمات بهداشت روانی در کانادا دسترسی داشته اید(یا سعی کرده اید دسترسی داشته باشید)؟

بله خیر

اگر پاسخ خیر است لطفا توضیح دهید

.....

.....

۲۰- لطفا چنانچه مواردی مهم در مورد تجربه زندگی در کانادا(مثبت یا منفی) و یا مشکلات سازگاری با محیط جدید به ذهن شما می‌رسد و مایلید با ما در میان بگذارید ذکر بفرمایید:

با تشکر از وقتی که در اختیار ما گذاشتید. لطفا پرسشنامه تکمیل شده خود را در صندوق قرار دهید.