

**THE IMPACT OF ATTACHMENT AND WE-NESS ON THE RELATIONSHIP
SATISFACTION AND MENTAL HEALTH OF IRANIAN-CANADIAN IMMIGRANT
COUPLES**

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Abstract

The purpose of this study was to better understand the psychological impact of immigration stress on the relationship satisfaction and mental health of Iranian immigrants. We-ness (i.e., degree of identification with the relationship with one's partner) and attachment (i.e., personal degree of anxiety and avoidance normally derived from significant relationships such as with one's parent), were explored as potential sources of resilience for immigrants. A sample of 108 Iranian Canadian immigrants (each in a relationship with a significant other) completed a package of self-report questionnaires either online or through hard copies. The data were analysed via hierarchical regression analyses. The results showed that higher immigration stress was predictive of higher mental health distress and lower relationship satisfaction. Additionally, attachment security (as reflected in lower scores on the avoidance and anxiety dimensions of attachment) predicted higher we-ness. Higher mental health distress was predictive of lower relationship satisfaction. On the other hand, higher we-ness was predictive of higher relationship satisfaction. Exploratory mediation analyses showed that the relationship between higher immigration stress and lower relationship satisfaction was partially mediated by lower we-ness and higher avoidance.

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The Impact of Attachment and We-ness on the Relationship Satisfaction and Mental Health of Iranian-Canadian Immigrant Couples

Immigration remains a very challenging social-psychological phenomenon in today's world. For most individuals there is a host of contributing factors leading to the decision to leave and re-start life in a new land including difficult social, economic, and political conditions in the country of origin combined with the hope and prospect of opportunities for a better life in the new country. Canada has been amongst one of the more liberal and welcoming countries in terms of accepting new immigrants in the past decades and it is in our interests to better understand and respect what is happening psychologically to the individuals who are going through the process of immigrating.

Redfield et al. (1936) defines acculturation as “those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups” (p. 149). The focus of this study is on the experiences of immigrants. While immigration offers the individual hope for a better future, it is also full of challenges that the individual will have to face and navigate. The challenges emerge because of change in many aspects of life including the need to learn a new language and having to adapt to new cultural norms, customs, and values. The process is understandably stressful and as a result the issue of immigrant mental health has been a key variable of study in prior research (e.g., Robert & Gilkinson, 2012). It should be noted, however, that this experienced stress can be varied amongst immigrants. It is possible to experience more stress when there are vast discrepancies amongst the cultures involved in the transition (Berry, 2006; Tohidi, 1993). It is also possible that the experience of immigration stress and mental health issues will vary amongst immigrants due in part to inherent dispositional differences in

coping of individuals. Indeed, as suggested by the diathesis-stress model, the pre-existing vulnerabilities of the individual may interact with the experienced stress and culminate in psychological difficulties (Monroe & Simons, 1991). Thus, the mental health of immigrants is an important issue to consider when they report more stress related to immigration (especially in those who have more dispositional reactivity to stress).

In addition to challenges of immigration for the individual, couples are also impacted in various ways. The focus of this study was on Iranian immigrant couples for three reasons. The first reason for studying Iranian Canadian immigrants was that the author and her family immigrated to Canada years ago and she is fluently bilingual in both Farsi and English. The researcher's familiarity with the Iranian culture, fluency in the language, and past immigration experience made it more likely that immigrants would volunteer to participate in her study. The second reason was that the author had connections and means to solicit a reasonable sample size of Iranian Canadian immigrants, especially relatively recent immigrants. This was important because the amount of research with Iranians is insufficient and while various factors contribute to a scarcity of research, challenges with recruitment is one of them (Chaichian, 1997; Namazi, 2014; Saedi, 2010). Iranians tend to be cautious about a researcher they do not know and thereby are likely hesitant in divulging their personal information (Chaichian, 1997). Similar points were also expressed by Darvishpour (2002) who conducted a study to investigate the impact of immigration on power changes and conflict amongst Iranian partners. The Darvishpour (2002) study, which focused on divorced Iranian immigrants in Sweden, was designed considering challenges such as the difficulty of participants sharing their personal information with an unfamiliar person. Lastly, the third reason for studying Iranian couples was that anecdotal

evidence and some research indicated immigration to Canada from Iran has been a challenge to marriages among these immigrants.

The Iranian immigrants face several challenges to their relationship with their partner upon immigration. Prior investigations have identified changes in individual values and changes in power dynamics between partners as important factors contributing to relational challenges faced by Iranian immigrant couples. Specifically, research shows that Iranian immigrants, both women (Hanassab & Tidwell, 1993; Hojat et al., 1999) and men (Hojat et al., 1999) shift in their attitudes and values relative to their counterparts in Iran on topics such as sexuality. As well, in the Iranian immigrant group, females tend to show more liberal attitudes towards change from the traditional cultural values than do the males (Hojat et al., 2000). Other research has also highlighted the shift in the male to female power dynamics amongst Iranian couples. While immigration presents Iranian females with many potential opportunities for growth and development, Iranian males' experience tends to be accompanied by loss of power and status (Darvishpour, 2002). Ahmadi (2003), focusing on the experiences of Iranians in Sweden, reported that there is a change in Iranians' thinking on topics such as sexuality when they are faced with the individualistic culture of Sweden. As well, there is a shift towards "egalitarian relationships" (Ahmadi, 2003, p. 317) amongst the partners. Ahmadi (2003) also pointed to a change in distribution of power in the relationship of partners. In his study, several interview participants were divorced within 6-36 months of coming to Sweden and these divorces were frequently prompted by the wives. Moghissi (1999), focusing on Iranians living in Canada, also reported "Iranian women, generally, demonstrate more capability than men, a greater readiness to cope with displacement, and more flexibility and resourcefulness in adjusting to new conditions" (p. 210). This discrepancy, can contribute to discord in the family (Moghissi, 1999).

Such challenges to the relationship are concerning given the benefits and overall importance of marital relationships to the general wellbeing of all individuals. For example, prior research with American adults utilizing data from the National Health Interview Surveys (which is a data collection program in the United States) showed that married individuals in general function better than other individuals (including those who were divorced, separated, widowed, never married, and living with a partner) on many measures including physical and psychological health (Schoenborn, 2004). Given such benefits of marriage, it is wise to further explore the stressful impact that an experience (such as immigration) can have on the couples' relationship and potential factors that may make them resilient.

This study is focused on the relationship satisfaction and mental health distress of Iranian immigrants. These variables were deemed specifically important to consider based on the findings of prior research. For example, Saedi (2010) highlights the need for further studies on Iranian mental health. Other researchers have pointed to the potential for change in the relationship of Iranian immigrants due to various factors such as gender incongruities in maintaining traditional values (Hojat et al., 2000) and changes in power dynamics (Darvishpour, 2002). Acculturation (and the associated stress) is only discussed in the context of its relevance to these two important outcomes. Furthermore, the focus of this study is on two well established psychological sources of strength in coping. One of these sources is the individual's quality of attachment reflecting their degree of felt security (i.e., low levels of anxiety and avoidance respectively) and ease with exploring new challenges. These personal levels of felt security are theorized to be derived or evolved from the quality of one's attachment with significant others since childhood. The other source of strength is when a person is in a marriage that in and of itself provides him/her with an added source of strength to respond to life's challenges. For an

immigrant, these challenges include all the changes and adjustments that come with immigrating to another country (such as professional difficulties, language barrier, and difficulties with fitting in). Each of these sources of strength are described below. The first is one's quality of attachment and the second is having a sense of we-ness (a strong sense of identification with one's intimate relationship).

Attachment

There is a vast literature on attachment including further developments in theory, research, and application of attachment theory (Cassidy & Shaver, 2016). There is a deliberate connection of attachment with theories of evolution (Cassidy & Shaver, 2016). Bowlby (1969), an originator of attachment theory, described attachment as an inherent biological response and behavioural system in place at birth to provide satisfaction of basic human needs. Studies of attachment across cultures have been done. Mesman et al. (2016) include the following final statement in their updated review of cross-cultural research in which they provide evidence for extensive support for attachment theory:

What has not changed since 2008 is that the available cross-cultural studies have not refuted the bold conjectures of attachment theory about the universality of attachment, the normativity of secure attachment, the link between sensitive caregiving and attachment security, and the competent child outcomes of secure attachment. (p. 871)

The pioneering work of Bowlby (1969, 1973, 1980) proposed that infants form an emotional bond with their caregiver. The formation of attachment is evolutionarily adaptive as it keeps the infant self-secure because of being supported by the attachment figure or mother even in the context of a strange situation. A classic and central finding by Ainsworth et al. (1978) is that babies identified as having a secure attachment were more likely to respond positively to the

return of their mother in a distressing situation than did other, less securely attached babies, who conveyed either an avoidance towards their mother or an anxious/ambivalent relationship with their mother.

Since those pioneering studies, attachment, and its correlation with many other variables have generated considerable research. For example, the study conducted by Hazan and Shaver (1987) links early infant attachment to later adult romantic attachment. Specifically, Hazan and Shaver (1987) conducted a study to investigate the concepts of attachment theory (initially developed in the context of infant-caregiver relationship) in adult love. They tested their hypotheses with two different samples of participants. The first study sample was recruited through a newspaper and included 620 subjects with a mean age of 36. The second study sample included 108 students enrolled in a university course with a mean age of 18. In both studies the subjects responded to questionnaires about their love experiences, mental models, attachment style and history. Their study tested several hypotheses. Importantly, they found that the proportion of adults in the three attachment categories of secure, avoidant, and anxious/ambivalent (categories identified in 1978 by Ainsworth and her colleagues) resembled the proportions of infants falling within each group (as shown in other studies). They also found that the love experiences and mental models of the participants in each attachment category were congruent with what is expected of that attachment style. This study provides support for the idea of continuity in attachment (Hazan & Shaver, 1987). However, the authors pointed to limits associated with the study (for example, using self report questionnaires to obtain data). The authors also highlighted ways in which adult love relationship is different than the infant-caregiver relationship (for example, the adult love involves reciprocal care giving and sexual attraction). Additionally, they pointed to the likelihood that involvement in significant

relationships throughout one's life provides a chance for change in mental models through experience.

Following the research by Hazan and Shaver (1987), numerous measures of adult romantic relationship attachment have been developed. Brennan et al. (1998) factor analyzed a number of these attachment measures completed by a large sample of respondents resulting in the development of the Experiences in Close Relationships measure, which assesses two dimensions of attachment: anxiety and avoidance. This measure was chosen to be utilized in the current study because its development is based on many other attachment measures. The Experiences in Close Relationships is also a good measure as it utilizes multiple items to assess attachment dimensions and has good psychometric properties (for further detail regarding the Experiences in Close Relationships, see the Measures section). The importance of measurement selection was also highlighted by Crowell et al. (2016) who reviewed a vast range of measurements of adult attachment. The kinds of measurements reviewed include narrative assessments, behavioural assessments, and self report measures. Crowell et al. (2016) admit that “one problem is the lack of convergence among different measures of adult attachment” (p. 624). They point out that “each measure was developed for a particular purpose. Therefore, in determining which one or more instruments to use for a particular study, a researcher should consider the theoretical assumptions underlying each instrument” (Crowell et al., 2016, p. 625). Again, these considerations were taken when choosing the measure of attachment utilized in this study.

Bowlby (1977) proposed that the quality of the initial relationship with the primary attachment figures impact future interpersonal relationships and personality. Specifically,

attachment can be thought of as a psychological schema¹ or a "working model" (Bowlby, 1973) that frames an individual's ideas/feelings about self and others. When humans are young, having a sense of security makes it easier for them to explore new situations and experiences. That security within one's sense of self is known to come from the quality of relationship with the primary caregiver. Having a secure relationship with the caregiver allows the child to approach new situations and explore the surrounding environment with less trepidation (Ainsworth et al., 1978; Bowlby, 1973). Should anything in this exploration become too stressful, the infant seeks the safety of the caregiver to whom he/she can come back to (Ainsworth et al., 1978; Bowlby, 1973). As children grow, they internalize this relationship with the caregiver. They carry this working model in how they relate to other people in the world (Bowlby, 1973). Bartholomew (1990) also put forth a conceptualization of adult attachment emerging because of two models working together, namely, the "model of the self" and "model of other." The model of the self is related to the appraisal of "the self as worthy of love and support or not" (Bartholomew & Horowitz, 1991, p. 227). The model of others appraises whether people are "trustworthy and available vs. unreliable and rejecting" (Bartholomew & Horowitz, 1991, p. 227). The models of self and others proposed by Bartholomew are in line, respectively, with the anxiety and avoidance dimensions of attachment (Brennan et al., 1998). Brennan et al. (1998) links these research findings by indicating, "a negative model of the self is closely associated with anxiety about abandonment and that a negative model of others is closely associated with avoidant

¹ Schema is defined as a mental structure that is rooted in past knowledge and experience. It facilitates the processing, retention and subsequent retrieval of information in a meaningful way (Fiske & Linville, 1980). In this dissertation the terms schema, working model, and mental model capture the same concept and are used interchangeably.

behavior” (p. 50). The two dimensions of anxiety and avoidance capture the essence of attachment (Brennan et al., 1998).

We-ness

Prior studies have shown that a major factor that makes partners resilient in the face of stress is the feeling of being part of an intimate relationship (i.e., we-ness) which allows partners to navigate relational challenges better. "We-ness" is the degree to which each partner identifies with the relationship (not each other) and views life experiences through a relational lens (Reid & Ahmad, 2015; Reid et al., 2006). Specifically, a sense of we-ness is akin to a psychological schema that incorporates the partner's experience of self in the relationship, the partner's understanding of how his/her partner is experiencing the relationship, and finally the reciprocal interplay amongst the partners (Reid et al., 2008). Thus, it is very possible individuals coping with acculturation adjustment challenges are more able to do so when they have a close relationship/partnership, with which the partners support each other to overcome and grow personally from meeting the immigration challenges. We-ness is distinct from other constructs such as social support where one has support from another but not a subtle intrapsychic shift—not an absolute change—in one's own identity. We-ness is an identification with the relationship shared with one's partner (Reid et al., 2006). This we-ness then becomes inherent in the way the members of the couple construe life experiences (Reid et al., 2006). The experience of being part of a committed emotional relationship requires the participation of both members in a way where the relationship is given much precedence in the lives of both partners. We-ness emerges from the juxtaposition and awareness of each partner's unique characteristics as well as an understanding of how they, as unique individuals, reciprocally impact one another (Reid et al., 2006). Constructs such as social support may imply providing care and assistance to another

person without necessarily internalizing the relationship or a deep understanding of the self, other, and the interaction between the two. A sense of we-ness is much more than the sum of its parts (the two individuals) (Reid et al., 2006). We-ness is an emergent phenomenon that comes about when two individuals form a relationship that is dynamic and is not only made of each partner's unique experiences but the interplay amongst them. This sense of we-ness comes out in the way the partners construe and speak about their relationship as well as the words they use to frame their thinking such as "us," "we," and "ours." A reliable we-ness coding system has been developed in prior work that aids in the coding of each partner's ways of thinking/experiencing his/her relationship with the other (Reid & Ahmad, 2015; Reid et al., 2006). What is coded is the actual words the client automatically uses when talking with and about each other. Prior empirical work has established the importance of we-ness in couples' relationship satisfaction. For example, the results of two studies showed that after couples participated in Systemic-Constructivist Couple Therapy, their sense of we-ness increased by the end of their therapy sessions and that resulting increased we-ness was correlated with increased relationship satisfaction (Reid et al., 2006). As well, a follow-up of one of these studies showed that the sense of we-ness of couples at the final session was correlated with their relationship satisfaction measured approximately two years later (Reid et al., 2006).

We-ness was originally developed by having distressed couples participate in therapy and their own investigation of their relationship, guided by the researcher over several sessions (Reid & Ahmad, 2015; Reid et al., 2008). Each couple received six, two-hour couple therapy sessions that were audio recorded with permission (Reid & Ahmad, 2015). In addition to therapy, "each couple was studied with a view to discerning the underlying dynamics as they unfolded" (Reid et al., 2008, p. 479). As data and observations accrued from working with many distressed couples,

the treating psychologist customized techniques and verbal probes to strengthen the partners' identification with their relationship (Reid & Ahmad, 2015). This ongoing research was initially based on theoretical and case-based work by Fergus and Reid (2001). Later, the findings and the series of techniques were combined into a couple therapy called Systemic-Constructivist Couple Therapy and further investigated empirically (see Reid et al., 2006).

Systemic-Constructivist Couple Therapy (SCCT) as outlined in Reid et al. (2006) is an intervention that aims to facilitate lasting improvement in the relationship quality of couples through enhancing the couple's we-ness. From the lens of SCCT, specific conflicts that arise between the partners are often secondary to problems in the relationship. What is most important is the relationship, not the presenting problems per se. A useful metaphor that is used to describe this view regarding relational problems is the figure-ground illusion (Reid et al., 2006). The conflicts the couples talk about are the foreground (Reid et al., 2006). However, the background is the quality of the relationship. When couples learn to greatly improve the relationship (i.e., the background) their foregrounded presenting issues can dissolve or be far more effectively resolved together. In SCCT, effort is directed towards enhancing and bringing about change in the relationship (i.e., the focus is on the background). Improvements in the relationship lead to specific problems either disappearing or the partners gaining the flexibility to view it from a more reciprocal, mutual lens (Reid et al., 2006). The likely benefit of an enhanced sense of we-ness is an increase in the longevity of the relationship (Reid & Ahmad, 2015).

In SCCT the emphasis is on the "assumptive world" (Reid et al., 2006) of the couple. Specifically, the focus is on each partner's feelings and thoughts about one's self, one's partner, and the interaction between the two (Reid et al., 2006). This deep processing and integration of each other's perspectives is the key to enhancing the couple's level of we-ness. The intervention

techniques of SCCT are aligned with the goal of enhancing we-ness. In the following paragraphs some of these intervention techniques are described as they can be utilized not just as therapy techniques, but also as self-immersive methods of processing the relationship in real time with the goal to support the development of we-ness (i.e., partner's mental model of the relationship).

One such intervention is called listening to understand versus listening to respond which helps couples hear the meaning inherent in each other's communication in contrast to listening superficially with the aim to respond back with one's own reactions (Reid et al., 2006). Listening to understand requires the listener to mute one's difference of opinion so that he/she can continue to listen accurately to the speaker's points of view. A person listening to understand stays with the speaker's comments and views while relaying back evidence that he/she understands what the speaker is getting at. What happens is that marital partners learn to convey that they value one another's points of view even when they may also retain different opinions. In that way partners can work together to talk through ideas or topics rather than merely convince the other.

A second technique in SCCT, which is designed to facilitate the couple's ability to become increasingly more aware of their intrapersonal as well interpersonal processes is called thinking and speaking in the third person (Reid et al., 2006). Essentially, the couples are asked to communicate about a difficult topic but to do so in the third person. An example is when a female client named Ruth has just said to her husband, John, the following, "When you refuse to clean up the kitchen, it deeply angers me to the point that I refuse to talk with you the rest of the evening." When she talks in the third person she says, "When Ruth sees John refusing to clean up the kitchen Ruth gets angry to the point that Ruth doesn't talk with John the rest of the evening." Her husband John, then responds to Ruth, but is also encouraged to reply in the third person. This method of communication requires more effort and is less automatic for the

partners. But taking part in the technique allows the couple members to engage in a conversation in which they talk *with* each other rather than *at* each other. This is helpful as it allows the partners to slow down enough to not only become more conscious of their own processing, but also that of their partner's, and the interaction between the two (Reid et al., 2006).

A third intervention utilized in SCCT is called internalizing the partner (Reid et al., 2006). The intervention is carried out after the initial sessions with the couple so that pertinent information has been shared and had a chance to come to surface. When implementing the intervention, the therapist interviews one of the partners while he/she attempts to "be" and respond as the other marital partner. The therapist starts with simple questions and slowly deepens the questions asked to encourage further exploration and processing. The entire interview unfolds as the other partner is in the room and a witness to the process. Once done the partners have an opportunity to discuss the experience and their reactions together. The interview is then repeated a second time so that the other partner also gets a turn being his/her partner. The benefit of internalizing the other partner procedure utilized in SCCT is that it facilitates a deep exploration of each partner's assumptive world about the self, the other, and the relationship. This deep engagement takes place while the other partner witnesses it and assists in increasing the consciousness of the partners of themselves and their reciprocal interaction. All the techniques utilized in SCCT work in concert towards the goal of increasing the partners' sense of we-ness which increases the partners' identification with the relationship.

Purpose of This Study

The purpose of this study was to better understand immigration challenges and the impact on the mental health and relationship satisfaction of immigrants. An additional aim of the study was to understand how two well-researched universal core psychological schemas allow partners

to navigate immigration challenges as they arise. These two underlying psychological schemas include: (1) one's degree of identification with the marriage (i.e., a sense of we-ness within one's identity) and (2) one's quality of attachment (assessed via the two dimensions of anxiety and avoidance). Both we-ness and attachment are about relationship dynamics. As mentioned earlier, changes in factors such as values and power dynamics of Iranian partners because of immigration, have been highlighted as sources of tension in their relationship in previous research. This study shifted the lens to intrapsychic (psychological) processes of couple members as they navigate immigration and investigated how relational schemas (i.e., we-ness and attachment) may contribute to their experience. This investigation was important as it contributes to better understanding of how the immigrant's ongoing relational dynamics with a significant other intersect with the individual's stressful experience of immigration. This understanding is valuable as a healthy relationship is the foundation upon which a healthy family is raised, and healthy families form healthy communities. As well, this study was designed to increase understanding of the factors that contribute to the resiliency of Iranian couples when in Canada and how they can be best supported through this process.

Hypotheses

The following are the hypotheses of this study:

Hypothesis 1

There will be a positive association between attachment security and level of we-ness. Specifically, individuals demonstrating attachment security (as measured through low ratings on anxiety and avoidance subscales of Experiences in Close Relationships measure) will report a higher level of we-ness in their relationship (as measured via the We-ness Questionnaire).

Attachment security and we-ness are sources of resilience. Both frame a person's mental model of relationships and guide how the individual organizes his/her experiences in relation to others. Attachment is a bond that is formed early on in relation to one's caregiver and shapes the young child's perception of availability of others and sense of self security in being able to explore the world but have a safe person to come back to, should the child feel overwhelmed. Similarly, we-ness reflects the individual's ability to participate in a dyadic romantic relationship in a way that he/she can pursue one's individual desires and goals but also allow one's partner's desires and goals to be intimately part of that experience. This sense of being a "we" becomes a source of resilience in that it enables the person to be more of him/herself (i.e., sense of self strengthened because of feeling so much a part of their relationship) than if he/she had not been part of the relationship. In contrast to the unidirectional nature of the infant-caretaker relationship which contributes to attachment security in early developmental years, we-ness is a bi-directional (reciprocal) process where both partners are intimately involved with each other's experiences and the relationship is a strong source of support for both partners.

Hypothesis 2

Higher reported immigration related stress will be positively associated with higher mental health distress.

Following the logic of the diathesis-stress model, mental health difficulties can become activated when a pre-disposed individual experiences high stress. Specifically, various vulnerabilities of an individual (such as, biological, and psychological factors) can interact with the stressors of immigration (such as, the challenges involved in adaptation to various new norms, values, and ways of being). The pre-existing vulnerabilities coupled with new stressors can prepare a fertile ground for manifestation of various mental health challenges.

While this hypothesis is guided by the logic and underlying principle of the diathesis-stress model, the aim of this study is not to test this model. The diathesis-stress model is merely utilized to better understand, explain, and more broadly contextualize the measured immigration stress and mental health distress in this study of Iranian-Canadian immigrants.

Hypothesis 3

There will be a positive association between the reported level of we-ness and relationship satisfaction.

Prior research shows that a strong sense of we-ness is positively associated with reported levels of relationship satisfaction. The more the individuals identify with the relationship they have with their partner (i.e., the higher their sense of we-ness), the more likely they are to draw satisfaction from the relationship.

This study seeks to replicate these prior findings as well as broaden their scope by using a recently developed self-report We-ness Questionnaire which was validated with an American sample (see Topcu-Uzer et al., 2020), amongst an Iranian immigrant group in Canada and extend the applicability of the We-ness Questionnaire with a new population.

Hypothesis 4

Higher immigration related stress will be negatively associated with relationship satisfaction.

Individuals who report higher immigration stress are particularly vulnerable to be more dissatisfied as they are attempting to fit into a new socio-cultural environment at a time when their prior support systems (such as family and friends) may not be easily accessible. Stress can prompt individuals to turn inward while trying to find personal ways to deal with the stressors and may lead to frustration with discrepancies between one's own traits and those of one's

partner (Reid et al., 2006). Hence, individuals experiencing high stress in their effort to find personal ways of adjusting to living in Canada will report lower relationship satisfaction.

Hypothesis 5

Higher mental health distress will be negatively associated with relationship satisfaction.

The challenges of individuals who report higher mental health distress will impact the satisfaction they are able to experience from their romantic relationship. Mental health difficulties can have various systemic manifestations. Specifically, the associated changes in affect, cognition, and biology (brain's chemistry) relevant to mental health difficulties have the potential to impact how satisfied individuals feel in their relationship.²

Exploratory Mediation Analyses

The predicted impact of higher immigration stress on lower relationship satisfaction and higher mental health distress (as discussed in Hypotheses 2 and 4) will be further investigated through exploratory mediation analyses to better understand the mechanisms through which stress impacts outcomes. Specifically, there will be an exploration of whether we-ness and attachment security (as measured through lower reports of anxiety and avoidance) mediate the relationship between immigration stress and outcomes of interests (relationship satisfaction and mental health). Given the shortage of research in this area with Iranians no formal hypotheses were made. However, exploratory analyses were deemed important to gain a richer understanding of the processes/mechanisms through which immigration stress may impact Iranians.

² One additional hypothesis was initially proposed to be investigated in this study. However, the data from one of the measures were un-interpretable and the hypothesis was not explored. Additional information is provided in Appendix A.

Method

Participants

All participants in this study were Iranian immigrants in a romantic relationship. The participants needed to have adequate proficiency in English to take part in the study because all the measures were in English. There were no restrictions on the participants' age, length of stay in Canada, gender, and educational background.

The survey package consisted of 9 measures,³ a demographic information sheet, and an optional comments sheet. In total, 149 attempts were made to complete the survey.⁴ All participants who had completed 5 out of 9 measures were included in the analyses. This inclusion of respondents who had completed 5 or more measures was because these participants had completed at least half of the questionnaire package and had provided enough data to be included in the analyses. The final sample for this study consisted of 108 individuals of whom 100 completed all nine measures and 8 of whom were partial completers (six individuals completed all but one, one person completed all but three, and one participant completed all but four measures).

Detailed information regarding the sample and the questions asked in the demographic information sheet is presented in Tables 1 and 2. The sample included 61.1% females and 38.9% males. The mean age was 45.28 ($SD = 12.99$). All participants except for one were born in Iran. The mean years living in Canada was 15.07 ($SD = 10.70$) ranging from 1 to 46 years (the

³ As mentioned previously, one of the 9 measures was not used in the study. See Appendix A for a further discussion.

⁴ 149 reflects the number of attempts at the survey (not the number of individuals who participated). Specifically, a cross comparison of all 149 attempts on key variables such as demographics identified a few cases where the demographic variables were similar. It was clear that some individuals attempted to do the survey a few times and either gave up or completed the survey eventually. The same cross-comparison was also done on the final sample analysed in this study to ensure that the sample did not contain any duplicates.

participants were not asked which city or part of Canada they resided in). In this study, 75% of the participants identified as Muslim. Most of the sample participants were married (90.7%) while the rest were in a relationship either living with (4.6%) or not living with their partner (4.6%). The mean years in a relationship with one's partner was 18.75 ($SD = 12.71$). Most of the participants were in a relationship with partners who were also Iranian (96.3%). More than half of the sample (60.2%) had an annual household income of \$60,000 or above. Most of the sample (83.4%) had a bachelor's degree or higher education and almost all (94.5%) had post-secondary education (college/vocational diploma or higher). This high level of reported education by the Iranian immigrants is in line with prior studies such as the one by Safdar (1998) who also found 96% of her study's Iranian-Canadian immigrant sample had post-secondary education.

Table 1*Demographic Information*

Characteristic	<i>N</i> (%)
Gender	
Female	66 (61.1)
Male	42 (38.9)
Country of birth	
Iran	107 (99.1)
Kuwait	1 (0.9)
Religious affiliation	
Muslim	81 (75.0)
Jewish	2 (1.9)
Baha'i	1 (0.9)
Christian	1 (0.9)
Zoroastrian	1 (0.9)
Other	22 (20.4)
Marital status	
Married	98 (90.7)
Not married, but in a relationship and living with my partner	5 (4.6)
Not married, but in a relationship (we are not living together)	5 (4.6)
Partner's background	
Iranian	104 (96.3)
Non-Iranian	4 (3.7)
Annual household income	
Less than \$20,000	9 (8.3)
\$20,000 to \$40,000	23 (21.3)
\$40,000 to \$60,000	11 (10.2)
\$60,000 to \$80,000	16 (14.8)
\$80,000 to \$100,000	14 (13.0)
Over \$100,000	35 (32.4)
Education	
High school diploma	6 (5.6)
College/vocational Diploma	12 (11.1)
Bachelor	56 (51.9)
Masters	24 (22.2)
PhD	10 (9.3)

Note. *n* = 108.

Table 2*Descriptive Data for the Participants*

Characteristic	<i>M</i>	<i>SD</i>	Range
Age ^a	45.28	12.99	20 - 83
Years living in Canada ^b	15.07	10.70	1 - 46
Years in a relationship with partner ^c	18.75	12.71	1 - 49

^a *n* = 108. ^b *n* = 107. ^c *n* = 99.

Procedure

The participants completed the measures either online or via hard copies (see Appendices E-M for a copy of the measures). From the 108 participants, 75 (69.4%) participated online and 33 (30.6%) completed hard copy versions of the measures. The measures were presented in the same order both online and via the hard copies. For those participating online, a link to the online questionnaires was sent via email (see Appendices C and D for a copy of the email and informed consent form sent to participants). A website called Formsite was used for the online completion of the questionnaires. For participants completing hard copy versions of the measures, a package was prepared containing a letter to the participant, an informed consent form, copies of the questionnaires, along with a pre-addressed and pre-stamped envelope so that the participants could simply send back their measures upon completion (see Appendices B and D for a copy of the letter and informed consent form included in the package).⁵ The package (which was pre-addressed and pre-stamped) was sent to Dr. David Reid (the researcher's supervisor) at York University. The sample for this study was recruited through snowball sampling. Lohr (2010) describes several sampling methods when attempting "to investigate characteristics of a population that is difficult to find, or that is dispersed widely in the target population" (p. 512). One of the methods described is snowball sampling which "is based on the premise that members of the rare population know one another" (Lohr, 2010, p. 517). In the current study, the sample was primarily recruited through the researcher's various connections within the Iranian community including her extended network of friends and acquaintances. They were informed of the study and presented with further information and the measures to complete either online or via hard copies. These individuals were also asked to invite their own network of Iranian

⁵ It should be noted that while the questionnaires were meant to be completed by individuals in a relationship independent of one another, this was not directly stated in the information given to the participants.

acquaintances to participate in the study either through forwarding the online link or passing on hard copies of the questionnaire package. Given that the participants were invited to share the study with their Iranian network, it is not possible to determine what percentage of the final sample for this study were part of the researcher's own friends and acquaintances. Participants who provided an email address, which indicated their interest to be paid, were compensated \$20 via Interact e-transfer. Of the 108 individuals in the final sample of this study 53 participants (49.1%) provided an email address and were sent \$20 via Interact e-transfer for their participation. A few (about 3-5) of these e-transfers were not accepted and were eventually returned as the participants did not deposit the money.

Ethics

The proposal for this research was reviewed and approved by the York University delegated Ethics Review Committee. Prior to participation, participants were informed of various aspects of the research including the purpose, risks and benefits, confidentiality, and their right to withdraw from participation at anytime. They were also provided with various contact information including those of the researcher and her supervisor in case there were any follow up questions or concerns post participation in the study.

Measures

The following sections describe the measures included in this study. The measures are included in Appendices E-M. Modifications were made to many of the measures due to various reasons including the need to keep the measures brief and aligned with goals of the study (details are provided in the description of the relevant measures). Additionally, the descriptive statistics for all the measures are presented in Table 3.

Table 3*Descriptive Statistics for All Measures in the Study*

Measure	<i>M</i> (SD)	Range
HS	13.61 (3.88) ^a	9-25
ECR	-	-
Anxiety	3.12 (1.17) ^b	1-6.89
Avoidance	2.87 (1.10) ^b	1-5.44
ISM	30.87(10.73) ^c	10-59
MMRS	21.70 (7.37) ^b	9-48
We-ness Questionnaire	52.54 (10.46) ^c	21-65
RRAS	40.07 (8.53) ^d	17-55
RSM	12.06 (5.60) ^d	0-18
BSI	17.92 (17.47) ^d	0-76

Note. HS = Hassles Scale; ECR = Experiences in Close Relationships; ISM = Immigration Stress Measure; MMRS = Majority-Minority Relations Survey; RRAS = Revised Relationship Assessment Scale; RSM = Relationship Strength Measure; BSI = Brief Symptoms Inventory.

The score for the Anxiety subscale and Avoidance subscale of the ECR measure was obtained through calculating the mean (i.e., the sum score was divided by the total number of items for each subscale). The score for all the other measures was obtained through calculating the total score (i.e., the sum score).

^a *n* = 103. ^b *n* = 108. ^c *n* = 107. ^d *n* = 106.

Experiences in Close Relationships

This measure was chosen because it was created in the Brennan et al. (1998) study which used a large sample of respondents and several measures of attachment to identify the core set of items best representing the theoretical construct of attachment. Specifically, their research included 60 attachment related constructs leading to a total of 482 items (which were reduced to 323 after removing essentially alike items). This reduction of items done by Brennan et al. (1998) led to the isolation of two underlying factors across the measures: avoidance and anxiety. Ultimately this psychometric work resulted in the Experiences in Close Relationships measure which is composed of 36 items in total (18 for each of the anxiety and avoidance subscales respectively) and takes approximately five minutes to finish. Each item is measured on a Likert scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). When completing the measure, the respondents are informed that it is about "how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship." Example items from the anxiety subscale include "I worry a fair amount about losing my partner" and "I worry that romantic partners won't care about me as much as I care about them." Example items from the avoidance subscale include "I don't feel comfortable opening up to romantic partners" and "I try to avoid getting too close to my partner." Brennan et al. (1998) have also demonstrated how the scores from the two subscales of the measure can be used to designate individuals to different attachment categories. The Cronbach's alpha for the measure is .91 for the anxiety subscale and .94 for the avoidance subscale (Brennan et al., 1998). In the current study, the Cronbach alpha coefficient was .89 for the anxiety subscale and .88 for the avoidance subscale.

The choice of Experiences in Close Relationships attachment measure was also related to an important theoretical consideration. Specifically, this instrument was deliberately selected because of its focus on attachment within adult romantic relationships. Crowell et al. (2016) after providing an extensive review of measurements of adult attachment state, “in light of the substantial differences among adult attachment measures, we urge that considerable caution be taken in how researchers present their findings” (p. 626). To this end, the Experiences in Close Relationships inventory was an optimal choice as it not only was carefully derived by utilizing several prior measures with a large sample (see Brennan et al., 1998), but the item contents were also theoretically about the respondents’ sense of attachment within adult romantic relationships (the measure and its items can be reviewed in Appendix E).

We-ness Questionnaire

A self-report measure of we-ness developed by Topcu-Uzer et al. (2020) was used in this study.⁶ The We-ness Questionnaire was developed to capture various aspects of we-ness in a comprehensive manner including its emotional, behavioural, and cognitive manifestations (Topcu-Uzer et al., 2020). The measure can be useful not only for research, but also for therapy

⁶ It is important to emphasize the degree of attention to the content validity of this measure. The measure was developed, tested, and reported as a PhD dissertation by Anna Vedes at the University of Zurich in Switzerland. Guy Bodenmann (Professor of Clinical Psychology at the University of Zurich) was her supervisor and Ashley Randall (Professor in Counselling Psychology at Arizona State University) was also on her committee. Professor David Reid, although not officially on the dissertation committee, gave major input into the development of the measure. Reid and Vedes met via skype at her initiative as well as exchanged emails on examining item wording and creating additional items for the measure. He also provided input into the psychometric analyses including choosing with Vedes the best items amongst those which were entered into the traditional psychometric statistical analyses. Upon graduating from the University of Zurich, Vedes invited Professor Ashley Randall to take over publishing the measure. The first author, Cigdem Topcu-Uzer was a post doctoral fellow working with Professor Randall who replicated the analyses of data provided by Anna Vedes and made minor adjustments to the questionnaire. Thus, the content of the items in this self report measure of we-ness were at least partially informed by Professor Reid who developed the concept of we-ness and created a coding system for measuring the respondent’s sense of we-ness with his own graduate students in preceding years.

purposes during which the clinician can utilize and review couple members' responses with them (Topcu-Uzer et al., 2020).

The measure is composed of 17 items. The respondents are asked to rate each item based on how much the item contributes to their we-ness on a scale of 1 (*not at all*) to 5 (*to a great extent*). Example items from the measure include "We tolerate and support each other's unique characteristics" and "We feel and show a genuine interest and supportiveness to each other's views, feelings, wishes and plans." The psychometric properties of the scale were tested on a sample of 434 adults who were in a relationship and living in the United States (Topcu-Uzer et al., 2020). Support for convergent and discriminant validity was obtained by using four other measures in the study. The results for three of the measures were in the anticipated direction. One of the measures, used to establish discriminant validity, however, showed a positive correlation with the We-ness Questionnaire. Specifically, the score for autonomy (a subscale of a more comprehensive Need Satisfaction Scale developed by La Guardia, Ryan, Couchman, and Deci, 2000) was positively correlated with the We-ness Questionnaire. The researchers explained this finding by referring to prior work by Reid et al. (2006) which point to we-ness facilitating the assertion of one's individuality. The We-ness Questionnaire showed good reliability (alpha coefficient = .95) and validity.

The current research was conducted prior to the final publication of the We-ness Questionnaire by Topcu-Uzer et al. in 2020. While the later published version contains 17 items, only 15 items were available at the time of conducting this research. Of these 15 items, two were removed due to overlap with other items in the measure and to keep the questionnaire brief. As such, the final We-ness Questionnaire used in this study contained a total of 13 items. As well, the words of some items were modified to make them easier to understand and comprehend by

the immigrant sample in this study. In the current study, the Cronbach alpha coefficient for the We-ness Questionnaire was .95.⁷

Relationship Strength Measure (RSM)

This is a two-item measure created for the purposes of this study to obtain a direct rating from the respondents on how much they see their relationship as a source of support in their adjustment to living in Canada. The information obtained from this measure complements the data obtained from the We-ness Questionnaire as they both capture how much the individual's relationship is a source of resilience for them. The two items from the measure were “My relationship with my partner has helped and benefitted me in my adjustment to living in Canada” and “My relationship with my partner has made my adjustment to living in Canada easier than if I wasn't in the relationship.” The respondents were asked to read each item and give a rating from 1 (*not all*) to 10 (*extremely*).⁸ The Cronbach alpha coefficient for the RSM in the current study was .88.

Revised Relationship Assessment Scale (RRAS)

The RRAS is a 12 item measure derived from a 15 item scale called ENRICH Marital Satisfaction (EMS) scale (Fowers & Olson, 1993). Sample items from the RRAS include "My partner understands and sympathizes with me" and "I have some needs that are not being met by our relationship" that was reverse coded. The items are rated on a Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The RRAS has demonstrated strong reliability through prior research. Specifically, the Cronbach alpha for the scale is .83 and .85 as reported by Nguyen

⁷ While the modifications made to the measure are not considered substantial (and the Cronbach alpha coefficient of .95 for the measure in the current study is the same as the published version), the deviations from the published version may still pose a limit on the interpretations drawn from the scale in the present study.

⁸ During the analysis, the ten-point scale (1-10) was shifted to the ten-point scale (0-9). The number 0 was deemed as a more appropriate number to represent *not at all* in the scale.

(2000) and Dalton (2001) respectively. For the current study, one of the items of the RRAS (which inquired about sexual feelings) was removed as it was deemed potentially uncomfortable for the participants to respond to. The final measure included a total of 11 items. The Cronbach alpha coefficient for the RRAS in the current study was .87.

Brief Symptoms Inventory (BSI)

This study used the Brief Symptoms Inventory (BSI; Derogatis, 1993) to measure mental health distress. The BSI is a self report instrument measuring psychiatric problems and is a short form version of the SCL-90-R (Derogatis & Cleary, 1977). The BSI has 53 items. Each item is measured on a five-point scale and the respondents are asked to pick a number ranging from 0 (*not at all*) to 4 (*extremely*). The measure yields nine psychiatric scale scores which are: depression, anxiety, obsessive-compulsive, hostility, psychoticism, somatization, interpersonal sensitivity, phobic anxiety, and paranoid ideation. The nine respective scales' internal consistency alpha coefficients ranged from .71 to .85 (Derogatis, 1993).

For the purposes of this study three out of the nine subscales that were deemed relevant and pertinent to the study sample were used. These included the depression, anxiety, and somatisation subscales. These subscales were included as they were more general mental health dimensions whereas the others were more specific to diagnostic categories. Additionally, the BSI has 4 items that are not part of any subscale but are incorporated in the measure to obtain important clinical information (i.e., sleep troubles, guilt feelings, thoughts of death, appetite). These items were also incorporated in the scale used in the present study. The scale in the current study consisted of 23 items. The Cronbach alpha for the overall scale in the current study was .95.

Immigration Stress Measure (ISM)

This measure was created for the purposes of this study. The respondents were asked to rate each of the 10 items on a six-point scale of 1 (*disagree strongly*) to 6 (*agree strongly*). The items were based on the authors' knowledge and experience with challenges that Iranians potentially face upon immigration to Canada. Hence, the measure was designed with the intention of measuring the potential stress level the Iranian-Canadian respondents are feeling as a result of immigration. Many of the items in this measure explore the respondents' stressful immigration experiences as it comes up in their interaction with the host culture (as opposed to their stressful experiences within their own ethnic culture). Sample items include “Sometimes I feel embarrassed when I speak English because I have an accent” as well as “Sometimes I feel my Iranian background is judged negatively by others and I have to work harder to prove myself to others.” The Cronbach alpha coefficient for the ISM in the current study was .86.

Majority-Minority Relations Survey

This study used a modified version of the Majority-Minority Relations Survey (MMRS; Sodowsky et al., 1991) which itself is based on the American International Relations Survey (AIRS; Sodowsky & Plake, 1991). The original scale, the AIRS, consists of 34 items and assesses three underlying factors: acculturation, language usage, and perceived prejudice (Sodowsky & Plake, 1991). The AIRS measure incorporates both multiple choice and Likert items. In general, a rating of 1 reflects “strong affiliation with Americans, suggesting assimilation” (Sodowsky & Plake, 1991, p. 209). A rating of 6 for Likert items (and a rating of 5 for multiple choice items) reflects “strong affiliation with one’s nationality group” (Sodowsky & Plake, 1991, p. 209). Finally a mid-range rating indicates an ability to participate in and integrate both cultures (Sodowsky & Plake, 1991). The AIRS scale was administered to individuals from

diverse backgrounds including Asia, Africa, Australia, Europe and Latin America. Sodowsky and Plake (1991) report the internal reliability of the measure was .89 for the whole measure and .79, .82, .88 for the acculturation, language use and perceived prejudice subscales in that order.

The Majority-Minority Relations Survey (MMRS) was later adapted to measure the acculturation of Hispanic and Asian individuals (Sodowsky et al., 1991). The adapted measure had 43 items which included all the original AIRS items plus extra items pertaining to the Hispanic and Asian populations (Sodowsky et al., 1991). After a reliability analysis the items were reduced to 38. The internal reliability for the whole measure was .95 and .89, .94, .92 for the acculturation, language use and perceived prejudice subscales in that order (Sodowsky et al., 1991).

For the purposes of this study, a modified version of the MMRS measure was put together by the author. Specifically, the measure was reviewed and only items that were deemed as relevant to the Iranian sample in this study (items that had the potential to capture immigration related stress in this group) were selected. The author and the research supervisor reviewed the items, discussed whether their content was sufficiently different from other questionnaire items, and agreed on the final choices. Some of the phrasing used in the scale was also modified to make it easier to understand and be relevant to the immigrant sample in this study. Many of the items included in the modified version of this measure (used for the current study), explore the respondents' stressful immigration experiences in relation to the host group (as opposed to their stressful experiences within their own ethnic group). The final measure consisted of 8 items. The Cronbach alpha coefficient for the MMRS in the current study was .85.

Hassles Scale

The Hassles scale was used in a study by Safdar (1998). It has 24 items that measure both acculturation specific and acculturation non-specific Hassles. Specifically, it has four subscales that measure in-group, out-group, family, and general hassles. The participants are asked to respond to each item based on “how much it has been a part of your life over the past few months.” They are asked to give a rating from 1 (indicating *not at all part of my life*) to 4 (indicating *very much part of my life*) when completing the measure.

The Hassles Scale used in the Safdar (1998) study was based on a longer version of the measure by Lay and Nguyen (1998) designed to measure the hassles experienced by Vietnamese students. The alpha coefficient of the four subscales in the original measure by Lay and Nguyen (1998) ranged from .76 to .89.

For the purposes of the current research, a modified version of the Hassles measure from the Safdar (1998) study was used. This choice was made as the Safdar (1998) study was also focused on an Iranian immigrant sample in Canada and the Hassle measure used in that research was deemed suitable for use with the present study’s Iranian sample. Specifically, the measure used in the Safdar (1998) study was reviewed and items that were regarded as particularly relevant to current immigration-related stress for Iranians (and not captured in the other questionnaire items included in this research) were selected by the author. Many of the items included in the modified version of the Hassles measure used in the present study, explore the respondents' stressful experiences within their own ethnic group (as opposed to the host). The final Hassles measure in this study included 9 items and the Cronbach alpha coefficient for the scale in the current study was .73

Comments Measure

Five open-ended questions were included in this research and participants were invited to respond to them if they were comfortable to do so. The purpose of these questions was to elicit further comment and feedback on the challenges and rewards of immigration that may have not been fully captured through the other measures.

Example items from this measure include "Is there something that you miss a lot about your life in Iran that you haven't been able to replace while living in Canada?" and "What would you say has been the best part of immigration for you?" The responses to these items were used to give context to the quantitative responses by giving the participants an opportunity to further elaborate on their subjective experience related to immigration. Specifically, the responses to these open-ended questions facilitated and enhanced the interpretation of the obtained quantitative data on the other measures in this research.

Results

Prior to the analyses, the data were examined to ensure there were no errors. The data were also explored to identify missing values. Four participants had missing data on the ECR measure. Specifically, the ECR has two subscales (anxiety and avoidance), and each subscale has 18 items. The first participant was missing one item from the avoidance scale (94.4% was completed) and three items from the anxiety scale (83.3% was completed). The second participant had no missing data on the avoidance subscale (100% was completed) and one missing item on the anxiety subscale (94.4% was completed). The third participant had no missing data on the avoidance subscale (100% was completed) and one missing item on the anxiety subscale (94.4% was completed). Finally, the fourth participant had four missing items on the anxiety subscale (77.8% was completed) and one missing item on the avoidance subscale

(94.4% was completed). Given that these four individuals had completed most of the items on the subscales they had missing data, for each participant the average rating of their own responses on that subscale was obtained and used for the missing items.⁹ Additionally, for six items on the We-ness Questionnaire, two participants had given ratings that were beyond the scale. Specifically, they had given a rating of 6 when the scale ranged from 1-5. These responses were treated as missing values and the average of their responses to the other items of the measure was obtained and used.¹⁰

The statistical models in this study were examined to check for the assumptions relevant to regression analysis. The scatter plots of standardized predicted values against standardized residuals were examined to check for linearity in the models. Multicollinearity was assessed through bivariate correlations and there were no issues. Independence in the observations was checked and confirmed through the Durbin-Watson statistic. The assumption of normally distributed residuals was examined through the Shapiro–Wilk test as well as visual inspection of the histograms. The residuals for some regressions pertaining to hypotheses as well as mediation analyses deviated from normality. In such cases, a regression diagnostic was performed to see if there were any potential influential outliers in the models. If any outliers were identified, the cases were removed, the regression was repeated without those cases, and the results were compared for consistency with the original model (for the hypotheses the specific details of the

⁹ It should be noted that using the average of the person’s responses to other items on a scale is a conservative approach to dealing with missing data and reduces variance. Ideally, future research should utilize more refined statistical approaches when handling missing data.

¹⁰ It should be noted that in this study participants were not screened or excluded based on the time they spent on completing the measures. Amongst those who completed the measures online, some participants had spent much shorter time than expected on the measures. As for those who completed hard copies of the measures, there was no way to gauge response time. Future studies will benefit from monitoring time spent on completing questionnaires by the participants.

reduced models are also described). The homoscedasticity of the regression models was examined through the modified Breusch-Pagan test which was significant for some of the hypotheses. This finding pointed to the presence of heteroscedasticity in some of the models. In such cases, as recommended by Hayes and Cai (2007), heteroscedasticity-consistent standard error estimators were used for the analyses. Additionally, there were some variations in the sample size depending on the regression being investigated (this was due to the varying N for the variables).

Hypotheses Testing

Hierarchical regression analyses were used to investigate Hypotheses 1-5. The reason for the use of hierarchical regression analyses was to control for the demographic variables that may be associated with the outcome variable in the first step (model/block 1) and then (with the removal of the demographic variable's impact) directly investigate the contribution of the study's independent variables on the outcome variable in the second step (model/block 2). The statistical models and results are described below.

Hypothesis 1

It was hypothesized that higher levels of attachment security (specifically, lower ratings on the anxiety and avoidance subscales of the ECR) would be associated with higher ratings of we-ness in the relationship. Prior to conducting the regression, the relationships amongst the demographic variables obtained in this study and the dependent variable of we-ness (as measured via the We-ness Questionnaire) were examined through a correlation analysis to detect any potential covariates that would need to be included in the regression model. The demographic variable age was significantly correlated with we-ness and was included in the regression model. In the hierarchical regression, the first model included the control variable age as the predictor

which explained 2% of the variance in the dependent variable (we-ness), $F(1, 105) = 2.31, p = .132$. In the next model, the addition of the two predictor variables (avoidance and anxiety) resulted in an increase of 32% ($p < .001$) in variance explained and the overall regression accounted for 34% of variance in we-ness, $F(3, 103) = 17.55, p < .001$.¹¹ Further results showed, that avoidance was a significant contributor to the model when holding the other variables constant ($B = -4.71, t = -4.83, p < .001, sr^2 = .22$) and accounted for 22% unique variance in we-ness. The result for the anxiety variable was in the predicted direction but did not reach the threshold of .05 alpha level for statistical significance testing ($B = -1.73, t = -1.55, p = .125, sr^2 = .04$). It should be noted that further regression diagnostic analysis was also performed which identified two influential outliers. These two cases were removed, and results showed that the regression model continued to remain significant ($R^2 = .38$), and avoidance ($B = -4.21, t = -4.72, p < .001, sr^2 = .21$) continued to account for significant unique variance in we-ness when holding the other variables constant. With the removal of these two cases, anxiety also reached the threshold of below .05 alpha level and accounted for significant unique variance in we-ness when controlling for the other variables ($B = -2.39, t = -2.37, p = .020, sr^2 = .08$). Overall, based on the results, the first hypothesis indicating that security in attachment is associated with higher reported we-ness was supported. The correlations and regression results are presented in Tables 4 and 5.

¹¹ The modified breusch-pagan test was significant for this model indicating heteroscedasticity. As such, heteroscedasticity-consistent standard errors were used to test the hypothesis.

Table 4*Correlations Amongst the Dependent, Predictor, and Demographic Variables in Hypothesis 1*

Variable	We-ness Questionnaire	Avoidance	Anxiety	Age
We-ness Questionnaire	-	-.55***	-.28**	-.15
Avoidance		-	.20*	.17*
Anxiety			-	-.14
Age				-

Note. $N = 107$.* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5*Hierarchical Regression With We-ness as the Dependent Variable*

Variable	<i>B</i>	<i>SE</i>	<i>HCSE</i>	ΔR^2	ΔF	<i>p</i>
Model 1				.02	2.31	.132
Age	-.12	.08				.132
Model 2				.32	24.65	<.001
Age	-.07		.06			.263
Avoidance	- 4.71		.98			<.001
Anxiety	-1.73		1.12			.125

Note. *HCSE* = heteroscedasticity-consistent standard error.

Hypothesis 2

It was hypothesized that higher reported immigration stress (as measured by the HS, ISM, MMRS) will be associated with higher reported mental health distress (as measured by BSI). Prior to conducting the hierarchical regression analysis, the relationship between the demographic variables and the dependent variable (BSI) were investigated to identify any potential covariates that may need to be included in the regression model. Two variables, gender and years living in Canada, were significantly correlated with the dependent variable (BSI) and were included in the regression model. In the hierarchical regression, the demographic variables gender and years living in Canada, were entered in the first block, and accounted for 12% of the variance in mental health distress, $F(2, 96) = 6.75, p = .002$. The addition of immigration stress variables (HS, ISM, and ISM) in the next block improved the model by 15% ($p < .001$) and the overall regression accounted for 27% of variance in mental health distress, $F(5, 93) = 7.04, p < .001$.¹² This final model showed that the immigration related stress measure ISM ($B = .55, t = 2.32, p = .023, sr^2 = .04$) and gender ($B = -6.16, t = -2.12, p = .036, sr^2 = .02$) accounted significantly for unique variance in the dependent variable when holding the other variables constant. Specifically, ISM accounted for 4% and gender accounted for 2% of unique variance in the dependent variable of BSI when controlling for other variables. Further regression diagnostic analysis was also performed to check for potential influential outliers in the model. Two cases were identified. As such, the regression analysis was conducted again with these two cases removed. Results continued to show that the overall regression was significant ($R^2 = .31$), and that ISM continued to account significantly for the unique variance within the dependent

¹² It should be noted that the modified breusch-pagan test was significant for this model which pointed to presence of heteroscedasticity. As such, heteroscedasticity-consistent standard errors were used when testing the hypothesis.

variable ($B = .48, t = 2.15, p = .034, sr^2 = .04$) when holding other variables constant. With the removal of the two outlier cases, however, the gender variable did not meet the .05 threshold for significance testing ($B = -5.02, t = -1.80, p = .076, sr^2 = .02$). Overall, based on the results, Hypothesis 2 was supported. The correlations and regression results are presented in Tables 6 and 7.

Table 6*Correlations Amongst the Dependent, Predictor, and Demographic Variables in Hypothesis 2*

Variable	BSI	HS	ISM	MMRS	Gender	Years living in Canada
BSI	-	.22*	.47***	.33***	-.31***	-.19*
HS		-	.13	.08	-.17*	-.06
ISM			-	.71***	-.32***	-.36***
MMRS				-	-.05	-.10
Gender					-	.10
Years living in Canada						-

Note. BSI = Brief Symptoms Inventory; HS = Hassles Scale; ISM = Immigration Stress

Measure; MMRS = Majority-Minority Relations Survey. $N = 99$. Gender: female = 0, male = 1.

* $p < .05$. *** $p < .001$.

Table 7*Hierarchical Regression With Mental Health Distress as the Dependent Variable*

Variable	<i>B</i>	<i>SE</i>	<i>HCSE</i>	ΔR^2	ΔF	<i>p</i>
Model 1				.12	6.75	.002
Gender	-.26	.16				.100
Years living in Canada	-10.56	3.41				.003
Model 2				.15	6.46	<.001
Gender	- 6.16		2.90			.036
Years living in Canada	- .06		.14			.688
HS	.60		.61			.323
ISM	.55		.24			.023
MMRS	.15		.28			.607

Note. HS = Hassles Scale; ISM = Immigration Stress Measure; MMRS = Majority-Minority

Relations Survey. *HCSE* = heteroscedasticity-consistent standard error.

Hypothesis 3

It was hypothesized that higher reported levels of we-ness would be associated with higher reported relationship satisfaction. Prior to proceeding, the relationships between the demographic variables and the dependent variable (RRAS) were explored via a correlation analysis to identify any potential covariates. Two variables, age, and years in a relationship with partner were significantly correlated with the relationship satisfaction outcome measure (RRAS). As such, these variables were included in the regression analysis. In the first block of the hierarchical regression, the two demographic variables, age and years in a relationship with partner, were entered which accounted for 12% of variance in the outcome measure, $F(2, 94) = 6.69, p = .002$. We-ness (measured via the We-ness Questionnaire and RSM) was entered in the second block, which increased the variance explained by 44% ($p < .001$), and the overall model accounted for 56% of variance, $F(4, 92) = 29.48, p < .001$.¹³ Further analysis showed, that we-ness (as measured via the We-ness Questionnaire) significantly accounted for unique variance in the outcome variable (RRAS) when other variables were held constant ($B = .56, t = 5.45, p < .001, sr^2 = .38$). Similarly, age significantly accounted for unique variance in the outcome (RRAS) when other variables were controlled for ($B = -.22, t = -3.00, p = .003, sr^2 = .03$). In other words, we-ness (as measured via the We-ness Questionnaire) accounted for 38% and age accounted for 3% of unique variance in the relationship satisfaction outcome variable (RRAS) when other variables were controlled for. It should be noted that a regression diagnostic was performed to check for influential outliers which led to identification of one case. Further analysis was also done after removing the outlier. Results showed that the regression model continued to remain significant ($R^2 = .67$) with we-ness as assessed via the We-ness

¹³ The modified breusch-pagan test was significant pointing to heteroscedasticity. As such, heteroscedasticity-consistent standard errors were used for this model.

Questionnaire ($B = .64, t = 7.31, p < .001, sr^2 = .47$) and age ($B = -.21, t = -2.91, p = .005, sr^2 = .03$) continuing to significantly account for unique variance in the model when controlling for other variables. Overall, the results of the regression analysis supported Hypothesis 3. The correlations and regression results are presented in Tables 8 and 9.

Table 8*Correlations Amongst the Dependent, Predictor, and Demographic Variables in Hypothesis 3*

Variable	RRAS	We-ness Questionnaire	RSM	Age	Years in a relationship with partner
RRAS	-	.72***	.20*	-.34***	-.24**
We-ness Questionnaire		-	.40***	-.23*	-.20*
RSM			-	.12	.13
Age				-	.86***
Years in a relationship with partner					-

Note. RRAS = Revised Relationship Assessment Scale; RSM = Relationship Strength Measure.

$N = 97$.

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

Table 9*Hierarchical Regression With RRAS as the Dependent Variable*

Variable	<i>B</i>	<i>SE</i>	<i>HCSE</i>	ΔR^2	ΔF	<i>p</i>
Model 1				.12	6.69	.002
Age	-.33	.12				.008
Years in a relationship with partner	.13	.12				.290
Model 2				.44	45.87	<.001
Age	-.22		.07			.003
Years in a relationship with partner	.13		.07			.069
We-ness Questionnaire	.56		.10			<.001
RSM	-.11		.13			.421

Note. RSM = Relationship Strength Measure. *HCSE* = heteroscedasticity-consistent standard error.

Hypothesis 4

It was hypothesized that higher immigration stress (as measured through HS, ISM, MMRS) would be associated with lower relationship satisfaction (as measured through RRAS). Before proceeding, a correlation analysis showed that the two demographic variables of years in a relationship with partner and age were significantly correlated with the outcome variable (RRAS). As such, these two covariates were included in the regression model to control for the impact of age and years in relationship with partner on the dependent variable and thereby directly determine the contribution of the immigration stress on relationship satisfaction. In the first block, the two demographic variables (age and years in a relationship with partner) were entered and explained 13% of variance in the outcome variable (RRAS), $F(2, 91) = 6.69, p = .002$. In the next block, the three predictor variables of immigration stress (as measured through HS, ISM, MMRS) were entered which increased the variance explained by 16% ($p < .001$) and the total model accounted for 29% of variance in the outcome variable, $F(5, 88) = 7.17, p < .001$. Furthermore, the analysis showed that the variables of age ($B = -.26, t = -2.28, p = .025, sr^2 = .04$) and MMRS ($B = -.37, t = -2.48, p = .015, sr^2 = .05$) significantly accounted for unique variance in the dependent variable (RRAS) when holding the other variables constant. In other words, when other variables were controlled for, age and MMRS accounted for 4% and 5% of unique variance in RRAS respectively. The results provided support for Hypothesis 4. The correlations and regression results are presented in Tables 10 and 11.

Table 10*Correlations Amongst the Dependent, Predictor, and Demographic Variables in Hypothesis 4*

Variable	RRAS	HS	ISM	MMRS	Age	Years in a relationship with partner
RRAS	-	.04	-.32***	-.46***	-.35***	-.25**
HS		-	.15	.08	-.39***	-.39***
ISM			-	.71***	-.06	-.09
MMRS				-	.19*	.14
Age					-	.85***
Years in a relationship with partner						-

Note. RRAS = Revised Relationship Assessment Scale; HS = Hassles Scale; ISM = Immigration

Stress Measure; MMRS = Majority-Minority Relations Survey. $N = 94$.

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

Table 11*Hierarchical Regression With RRAS as the Dependent Variable*

Variable	<i>B</i>	<i>SE</i>	ΔR^2	ΔF	<i>p</i>
Model 1			.13	6.69	.002
Age	-.32	.12			.010
Years in a relationship with partner	.11	.12			.373
Model 2			.16	6.66	<.001
Age	-.26	.12			.025
Years in a relationship with partner	.08	.12			.499
HS	-.06	.21			.767
ISM	-.07	.10			.509
MMRS	-.37	.15			.015

Note. HS = Hassles Scale; ISM = Immigration Stress Measure; MMRS = Majority-Minority

Relations Survey.

Hypothesis 5

It was hypothesized that higher mental health distress (as measured via BSI) will be associated with lower relationship satisfaction (as measured via RRAS). Prior to proceeding, a correlation analysis was conducted and identified a significant relationship between the outcome variable (RRAS) and two demographic variables (years in a relationship with partner and age). As such, these demographic factors were included as covariates in the regression analysis. In the first block of the regression, the demographic variables (years in a relationship with partner and age) were entered which accounted for 12% of the variance in the outcome variable, $F(2, 94) = 6.69, p = .002$. In the next block, the predictor variable (BSI) was entered which accounted for an additional 7% ($p = .005$) of variance, and the total model explained 20% of variance in the outcome variable, $F(3, 93) = 7.60, p < .001$. Furthermore, the analysis showed that both BSI ($B = -.13, t = -2.89, p = .005, sr^2 = .07$) and age ($B = -.40, t = -3.33, p = .001, sr^2 = .10$) accounted for unique variance in the model when the other variables were held constant. Specifically, mental health distress (BSI) accounted for 7% and age accounted for 10% of unique variance in relationship satisfaction (RRAS) when controlling other variables. It should also be noted that a regression diagnostic analysis was also conducted which led to identifying one potential influential case. Further analysis was done with this case removed which showed that the regression model continued to remain significant ($R^2 = .24$) and the two variables of BSI ($B = -.14, t = -3.33, p = .001, sr^2 = .09$) and age ($B = -.42, t = -3.69, p < .001, sr^2 = .11$) continued to account for unique variance in the dependent variable (RRAS) when holding other variables constant. Overall, the results showed that Hypothesis 5 was supported. The correlations and regression results are presented in Tables 12 and 13.

Table 12*Correlations Amongst the Dependent, Predictor, and Demographic Variables in Hypothesis 5*

Variable	RRAS	BSI	Age	Years in a relationship with partner
RRAS	-	-.18*	-.34***	-.24**
BSI		-	-.20*	-.12
Age			-	.86***
Years in a relationship with partner				-

Note. RRAS = Revised Relationship Assessment Scale; BSI = Brief Symptoms Inventory. $N = 97$.

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

Table 13*Hierarchical Regression With RRAS as the Dependent Variable*

Variable	<i>B</i>	<i>SE</i>	ΔR^2	ΔF	<i>p</i>
Model 1			.12	6.69	.002
Age	-.33	.12			.008
Years in a relationship with partner	.13	.12			.290
Model 2			.07	8.37	.005
Age	-.40	.12			.001
Years in a relationship with partner	.17	.12			.165
BSI	-.13	.05			.005

Note. BSI = Brief Symptoms Inventory.

Exploratory Mediation Analyses

In this study, there was a particular interest in immigration stress and its impact on key factors such as mental health and relationship satisfaction (as explored in Hypotheses 2 and 4 respectively). The analyses of these hypotheses showed that higher immigration stress significantly accounted for lower mental health and lower relationship satisfaction, respectively.

Given the sources of resilience that were measured in this study (i.e., we-ness and attachment) additional analyses were run to investigate whether these two sources of resilience mediated the relationships investigated in Hypotheses 2 and 4. A mediator is the means “through which the focal independent variable is able to influence the dependent variable of interest” (Baron & Kenny, 1986, p. 1173). The mediation analyses (Baron & Kenny, 1986) and the significance testing of the indirect effects (Sobel, 1982) are presented below.

Impact of Immigration Stress on Relationship Satisfaction

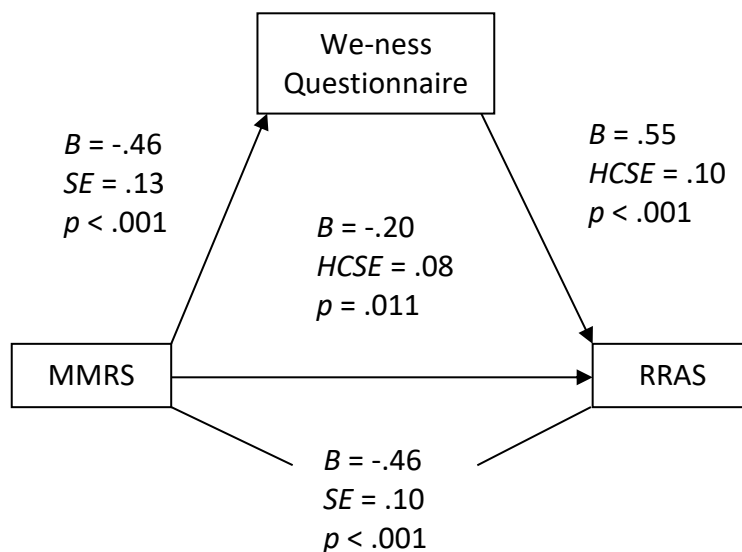
In Hypothesis 4 of this study, the impact of immigration stress (as measured via ISM, MMRS, HS) on relationship satisfaction (RRAS) was explored. As presented earlier, the overall regression model for Hypothesis 4 (which included all the variables for the model) was significant and specifically MMRS (an immigration related stress measure which mainly focused on the experienced stress in interaction with members of the majority group) significantly accounted for unique variance in relationship satisfaction. Additional analyses were run to explore the potential mediating role of we-ness and attachment (as measured through two ECR subscales of anxiety and avoidance) respectively. Results are discussed below.

We-ness as a Mediator. A mediation analysis was conducted via a series of regressions. The results are depicted in Figure 1. First, the relationship between the predictor variable of immigration stress (as measured by MMRS) and the dependent variable of relationship

satisfaction (as measured by RRAS) was analysed and the total effect was significant ($B = -.46, p < .001$). Second, the direct effect of the predictor variable of immigration stress (as measured by MMRS) on the mediator variable of we-ness (as measured by the We-ness Questionnaire) was analysed and the result was significant ($B = -.46, p < .001$). Third, a multiple regression analysis was run to assess the impact of both the predictor variable (MMRS) and the mediator variable of we-ness on the dependent variable (RRAS). Results showed that the relationship between the predictor variable (MMRS) and the dependent variable (RRAS) was significant ($B = -.20, p = .011$) when holding the other variable constant. The relationship between the mediator variable of we-ness and the dependent variable of relationship satisfaction (RRAS) was also significant ($B = .55, p < .001$) when controlling for the other variable. Finally, the indirect effect of immigration stress (MMRS) on relationship satisfaction (RRAS) via the mediator of we-ness was tested using the Sobel test. The result was significant ($z = -2.98, p = .003$). Therefore, we-ness partially mediated the relationship between immigration stress (MMRS) and relationship satisfaction (RRAS). This was a partial mediation because the initial impact of the predictor variable on the dependent variable ($B = -.46, p < .001$) was reduced ($B = -.20, p = .011$) with the inclusion of the mediator in the multiple regression but continued to remain statistically significant. The significant partial mediation indicates that immigration stress affects relationship satisfaction both directly as well as indirectly through lowering the partners' sense of we-ness. In other words, the relationship between higher immigration stress and lower relationship satisfaction is partially reduced by higher we-ness.

Figure 1

The Relationship Between Immigration Stress and Relationship Satisfaction Mediated by We-ness

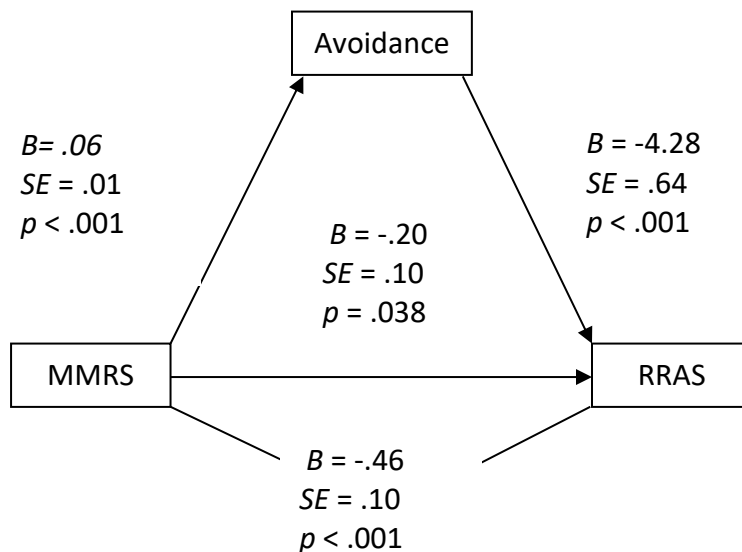


Note. MMRS = Majority Minority Relations Survey; RRAS = Revised Relationship Assessment Scale. *HCSE* = heteroscedasticity-consistent standard error.

Avoidance Dimension of Attachment as a Mediator. The mediation was conducted via several regression analyses (see Figure 2). First, the relationship between the predictor variable of immigration stress (as measured by MMRS) and the dependent variable of relationship satisfaction (as measured by RRAS) was investigated and the total effect was statistically significant ($B = -.46, p < .001$). Second, the direct effect of the predictor variable of immigration stress (as measured by MMRS) on the mediator (as measured by avoidance) was investigated and it was statistically significant ($B = .06, p < .001$). Third, a multiple regression was conducted to investigate the impact of the predictor variable (MMRS) and the mediator (avoidance) on the dependent variable (RRAS). The results showed that both MMRS ($B = -.20, p = .038$) and avoidance ($B = -4.28, p < .001$) accounted for unique variance in the dependent variable (RRAS) when the other variable was controlled for. Finally, the indirect relationship between immigration stress (MMRS) and relationship satisfaction (RRAS) via the mediator (avoidance) was tested using the Sobel test. The result was statistically significant ($z = -4.47, p < .001$). Hence, the results showed that avoidance partially mediated the relationship between immigration stress (MMRS) and relationship satisfaction (RRAS). In other words, higher immigration stress can lower the satisfaction derived from one's romantic relationship through higher avoidance (i.e., distancing from the relationship). However, immigration stress can also directly impact relationship satisfaction.

Figure 2

The Relationship Between Immigration Stress and Relationship Satisfaction Mediated by Avoidance

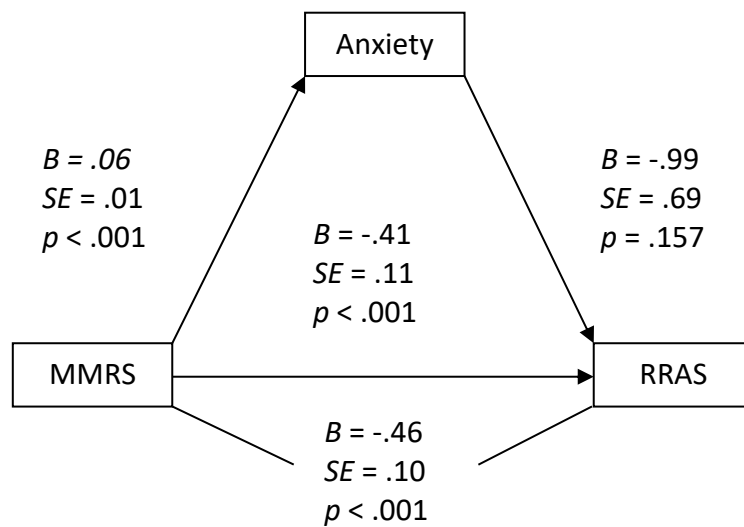


Note. MMRS = Majority Minority Relations Survey; RRAS = Revised Relationship Assessment Scale.

Anxiety Dimension of Attachment as a Mediator. A mediation analysis was run to investigate the potential mediating role of the anxiety aspect of attachment on the relationship between immigration stress (as measured via MMRS) and relationship satisfaction (as measured via RRAS). The results are depicted in Figure 3. First, the relationship between immigration stress (MMRS) and relationship satisfaction (RRAS) was investigated via a regression analysis and the total effect was statistically significant ($B = -.46, p < .001$). Second, the direct effect of the predictor variable of immigration stress (MMRS) on the mediator variable (anxiety) was analysed and the results were statistically significant ($B = .06, p < .001$). Third, a multiple regression was run to investigate the impact of the predictor variable (MMRS) and the mediator (anxiety) on the dependent variable (RRAS). While the overall regression was significant, the results showed that only immigration stress (MMRS) was statistically significant ($B = -.41, p < .001$) and predicted unique variance in the dependent variable (RRAS) when holding the other variable constant. Specifically, in the multiple regression, the mediator was not statistically significant ($B = -.99, p = .157$). Hence, the results did not provide support for the anxiety aspect of attachment mediating the relationship between immigration stress and relationship satisfaction.

Figure 3

The Relationship Between Immigration Stress and Relationship Satisfaction Mediated by Anxiety



Note. MMRS = Majority Minority Relations Survey; RRAS = Revised Relationship Assessment Scale.

Impact of Immigration Stress on Mental Health Distress

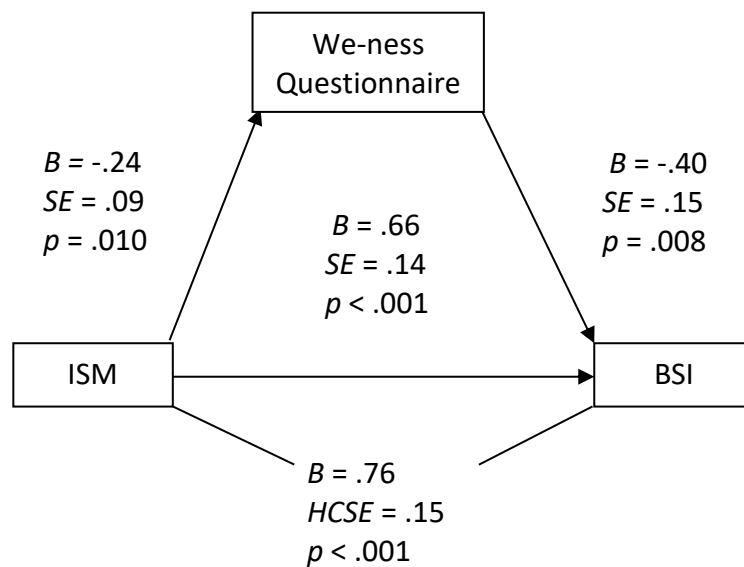
In Hypothesis 2, the impact of immigration stress (as measured via ISM, MMRS, HS) on mental health distress (as measured via BSI) was investigated. As presented earlier, the overall regression model for Hypothesis 2 (which included all the variables for the model) was significant and specifically ISM (an immigration related stress measure which generally focused on the stress experienced within the mainstream culture) significantly accounted for unique variance in the outcome measure of mental health distress (BSI). Additional analyses were run to investigate whether we-ness and attachment (as measured through two ECR subscales of anxiety and avoidance) each mediated the relationship. The results are discussed below.

We-ness as a Mediator. The potential mediating role of we-ness (as measured via the We-ness Questionnaire) in the relationship between immigration stress (as measured via ISM) and mental health distress (as measured via BSI) was investigated via a series of regressions. The results are shown in Figure 4. First, the relationship between the predictor variable of immigration stress (ISM) and the dependent variable of mental health distress (BSI) was analysed and the total effect was statistically significant ($B = .76, p < .001$). Second, the direct effect of the predictor variable of immigration stress (ISM) on the mediator variable of we-ness was analysed and it was statistically significant ($B = -.24, p = .010$). Third, a multiple regression was conducted to investigate the impact of the predictor variable (ISM) and the mediator variable of we-ness on the dependent variable (BSI). The multiple regression was significant with both immigration stress as measured via ISM ($B = .66, p < .001$) and we-ness ($B = -.40, p = .008$) accounting for significant unique variance in mental health distress when holding the other variable constant. Finally, the indirect effect of immigration stress (ISM) on mental health distress (BSI) via the mediator of we-ness was tested with the Sobel test. The result was not

significant ($z = 1.89, p = .059$). Hence, results did not provide sufficient support for we-ness as a mediator in the relationship between immigration stress (ISM) and mental health distress (BSI).

Figure 4

The Relationship Between Immigration Stress and Mental Health Distress Mediated by We-ness

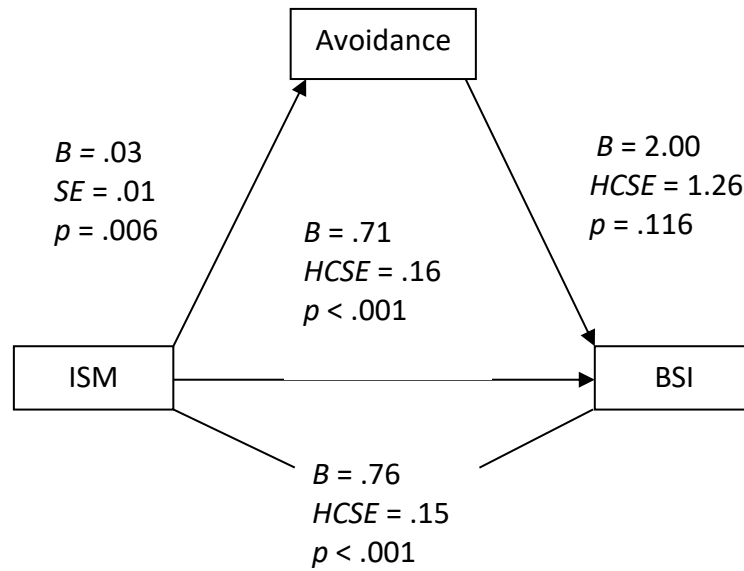


Note. ISM = Immigration Stress Measure; BSI = Brief Symptoms Inventory. *HCSE* = heteroscedasticity-consistent standard error.

Avoidance Dimension of Attachment as a Mediator. The impact of immigration stress (ISM) on mental health distress (BSI) was investigated via the avoidance aspect of attachment as a potential mediator (see Figure 5). First, the relationship between immigration stress (ISM) and the mental health distress (BSI) was investigated and the total effect was significant ($B = .76, p < .001$). Second, the direct effect of immigration stress (ISM) on the mediator (avoidance) was investigated and it was significant ($B = .03, p = .006$). Third, a multiple regression was run to investigate the impact of the predictor variable of immigration stress (ISM) and the mediator variable (avoidance) on the dependent variable of mental health distress (BSI). The overall regression was significant, and the results showed that immigration stress (ISM) significantly predicted unique variance in the dependent variable of mental health distress ($B = .71, p < .001$) when holding the other variable constant. However, the relationship between the mediator (avoidance) and the dependent variable of mental health distress (BSI) was not statistically significant ($B = 2.00, p = .116$) when controlling for the other variable. Hence, the results did not provide support for avoidance as a mediator in the relationship between immigration stress (ISM) and mental health distress (BSI).

Figure 5

The Relationship Between Immigration Stress and Mental Health Distress Mediated by Avoidance

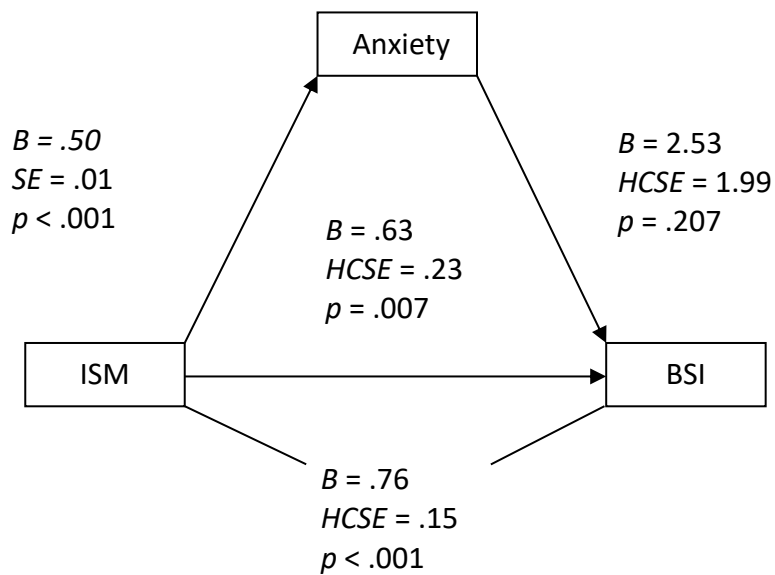


Note. ISM = Immigration Stress Measure; BSI = Brief Symptoms Inventory. *HCSE* = heteroscedasticity-consistent standard error.

Anxiety Dimension of Attachment as a Mediator. A series of regressions were conducted to investigate the potential mediating role of the anxiety aspect of attachment, in the relationship between immigration stress (as measured via ISM) and mental health distress (as measured via BSI). The results are depicted in Figure 6. First, the relationship between immigration stress (ISM) and mental health distress (BSI) was investigated and the total effect was significant ($B = .76, p < .001$). Second, the direct effect of the predictor variable of immigration stress (ISM) on the mediator variable (anxiety) was investigated and the result was significant ($B = .50, p < .001$). Third, a multiple regression was run to investigate the impact of the predictor variable of immigration stress (ISM) and the mediator (anxiety) on the dependent variable of mental health distress (BSI). The result showed that the overall regression was significant, and that immigration stress (ISM) significantly predicted unique variance in mental health distress ($B = .63, p = .007$) when controlling for the other variable. However, the mediator (anxiety) did not account for unique variance in the model ($B = 2.53, p = .207$) when holding the other variable constant. Hence, the results did not provide support for the anxiety dimension of attachment as a mediator in the relationship between immigration stress (ISM) and mental health distress (BSI).

Figure 6

The Relationship Between Immigration Stress and Mental Health Distress Mediated by Anxiety



Note. ISM = Immigration Stress Measure; BSI = Brief Symptoms Inventory. *HCSE* = heteroscedasticity-consistent standard error.

Discussion

The purpose of this research was to better understand the challenges of immigration stress on the mental health and relationship satisfaction of Iranian Canadians and to focus on the potential role of two rather universal psychological phenomena that may help mitigate the stressful impact of immigration. These two phenomena are (1) the immigrant's attachment security as reflected in lower levels of anxiety and avoidance and (2) the immigrant's sense of we-ness as reflected in the degree to which the immigrant feels psychologically close to his/her relationship with the marital partner.

Hypotheses Findings

In Hypothesis 1, the relationship between attachment security (as measured via lower ratings on anxiety and avoidance dimensions) and we-ness (as measured via the We-ness Questionnaire) was investigated. The regression model included anxiety and avoidance as predictors, we-ness as the dependent variable, and controlled for the demographic variable age. The overall regression model was significant and predicted 34% of variance in we-ness. Specifically, the regression model showed that higher attachment security (as reflected in lower scores on avoidance and anxiety) was predictive of higher levels of we-ness.

Of note, lower avoidance predicted 22% of unique variance in higher we-ness. Theoretically the avoidance dimension of attachment is related to one's mental model of others and is considered formed early in development through one's interaction with a significant other. According to Bowlby (1973) this aspect of attachment is related to "whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection" (p. 204). This mental model continues to shape how one perceives others as well as the information that is attended to and processed when in a relationship. The results of this

study showed that the avoidance mental model of attachment is especially impactful and predictive of lower we-ness. When early experiences of attachment lead one to conclude that others are less reliable and less responsive to needs, it is understandable to report less closeness or relationship identity with an intimate partner. Edelstein and Shaver (2004), upon discussion of relevant research, indicate that for avoidant individuals, their “close relationships are less intimate, interdependent, satisfying, and long-lasting than those of secure individuals” (p. 409). In line with this, Mikulincer and Nachshon (1991), in their study with a sample of university students, found that relative to those with secure attachment, individuals with avoidant attachment reported less self-disclosure in the context of their relationships with their parents, partners, and friends of similar gender. It should be noted that avoidance has also been linked to physical intimacy in prior research. Specifically, Brassard et al. (2007) reported a positive relationship between the avoidance dimension of attachment and avoidance of sexual activities in their sample of 273 French-Canadian couples. The study by Brennan et al. (1998), which used a big sample of 1086 individuals, also investigated how attachment may be related to touch in intimate relationships. One of their findings was that avoidant participants reported more dislike for touch and had higher scores on their touch aversion scale. The current study, as well as the published research discussed, point to different ways in which the avoidance dimension of attachment can impact the couple’s intimacy.

The preceding discussion of how avoidance may intersect with a person’s degree of we-ness could lead to the speculation that an individual difference in attachment, theoretically developed since one was very young, may play a role in how well the person would develop a sense of we-ness as an adult in a marital relationship. It is important to underscore, however, that the preceding is only a speculation as this study only obtained the respondents’ scores at one

point in time. Stronger conclusions may be drawn from a longitudinal research design which would allow for the measurement of the respondents' degree of attachment security when young and then a subsequent measurement of the same respondents' degree of we-ness in their marital relationship with their partner years later.

The evidence for the anxiety dimension of attachment predicting unique variance in we-ness did not reach the threshold for significance testing ($\alpha .05$).¹⁴ Nevertheless, the relationship was in the predicted direction, and given the theoretical rationale, it will be useful to further study this relationship in the future. As mentioned previously, the anxiety dimension of attachment is traditionally interpreted as being related to one's implicit model of the self. According to Bowlby (1973) this aspect of attachment is related to “whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular, is likely to respond in a helpful way” (p. 204). Prior researchers have theorized that throughout the early years of life, the child forms a working model of the self and over numerous interactions with the caregiver, concludes whether one is considered securely lovable. This working model of the self as securely loveable may be related to the we-ness schema in an intimate relationship. Specifically, when one perceives/experiences the self as relatively anxious in relationship with a significant other, it is challenging to feel sufficiently at ease with a more reciprocal connection with another, to accept attention from an intimate partner, and to recognize one's contribution to the relationship shared with the partner. Previous studies have pointed to a link between attachment anxiety and other theoretically compatible constructs. For example, Attachment anxiety has been associated with lower self-esteem in prior research (Collins & Read, 1990).

¹⁴ As mentioned earlier in the result section, the regression diagnostics performed pointed to two influential outliers. With the removal of the two cases anxiety also became statistically significant ($B = - 2.39$, $t = - 2.37$, $p = .020$, $sr^2 = .08$).

Additionally, Lavy et al. (2010) focusing on intrusiveness between couple members, found higher scores on the anxiety dimension of attachment to be predictive of more intrusive conduct in the relationship. The researchers express that this is “probably because of chronic worries about their relationships and their value in their partners’ eyes” (Lavy et al., 2010, p. 555). Pistole (1994) has also pointed to the challenges of insecurely attached individuals with managing distance and closeness in relationships. For example, anxiety in attachment can contribute to a person pursuing more closeness as well as misunderstanding the partner’s actions as indications of being abandoned. These prior findings point to some ways in which intimacy in a relationship may be impacted by attachment anxiety.

In this study attachment and we-ness were investigated as sources of resilience that may be helpful in mitigating the impact of immigration stress on important outcomes (such as, relationship satisfaction and mental health). In this hypothesis, attachment that is assumed to have developed in childhood was shown to be predictive of the experience of we-ness as an adult in a romantic relationship. While attachment is a bond that is formed in early years of life and part of one’s history and can change, we-ness is an ongoing experience and framing of intimate relational experiences that can be accessed in real-time. This evolution of comfort with attachment and deepening one’s identification with a committed relationship could provide an opportunity (i.e., through couple’s therapy or workshops focused on enhancing the partners’ sense of we-ness) to bring forth each immigrant’s deeply held perceptions about the self and the other partner while consciously experiencing and learning about the relationship. The increased insight allows partners to be more aware of their own internal processes as well as their interpersonal dynamics and to come up with more novel ways of experiencing their relationship (rather than their habitual ways). This increased insight benefits the relationship overall, as an

enhanced sense of we-ness is associated with higher relationship satisfaction. Those integrated interpersonal with intrapersonal dynamics can help the immigrants to work towards greater adjustment to living in the host culture and society.

In Hypothesis 2, the relationship between immigration stress and mental health distress was investigated via a regression model. The model included three measures of immigration stress as predictors (ISM, MMRS, HS), one measure of mental health distress as the dependent variable (BSI) and controlled for two demographic variables (years living in Canada and gender). The overall regression model was significant and predicted 27% of the variance in the measure of mental health distress (BSI). Specifically, the regression model showed that higher immigration stress was predictive of higher mental health distress.

Of note are the higher reports of stress on the Immigration Stress Measure (ISM), predicting 4% of unique variance in higher mental health distress (as reported on the BSI measure). This finding points to the usefulness of the Immigration Stress Measure (ISM) for capturing the immigration stress of Iranians (especially as experienced in their interactions with members of the host group). Specifically, the Immigration Stress Measure (ISM) was a scale created for the purposes of this study. Besides predicting unique variance in the model, it also demonstrated good internal reliability (Cronbach alpha coefficient = .86). In addition, some of the item-content of the ISM appeared to be subsequently related to the reported challenges by the participants in the open-ended Comments Measure included in their questionnaire package. For example, when asked about their biggest challenge as an immigrant, the respondents had commented on professional and financial difficulties, language barrier, as well as fitting in.¹⁵ As a measure of immigration stress, ISM, also included items related to language difficulties (i.e.,

¹⁵ See Appendix N for a description of some of the main themes from the participants' responses in the Comments Measure.

items 3, 4, 5) and fitting in (i.e., item 2). As well, in the Comments Measure, when asked about what they missed a lot as the result of immigration, many participants referred to close bonds (i.e., family, friends) which was also inquired about in the ISM (i.e., item 10).

The results of this study showed that higher immigration stress significantly predicted higher mental health distress in Iranians. This finding is important as more research is needed regarding the mental health of Iranians. For example, Saedi (2010) discusses the mental health distress experienced by Iranians living in various countries all over the world (including those living inside of Iran itself) and indicates that research on Iranian mental health needs to be improved upon at a global level (but especially in the United States). In a later study by Shishehgar et al. (2015), a literature review was conducted to investigate factors impacting the mental health of Iranian immigrants. Their final review included 26 articles published in a span of 33 years (between 1980-2013), using various research methods (quantitative, qualitative, and mixed) and conducted in various countries (such as Canada, Australia, Sweden, and the United States). Various social and cultural factors were identified in this review as impactful on the mental health of Iranian immigrants including social support, language, employment, discrimination, intimate partner violence, culture shock, and lack of awareness about the host country's health care system. The review concluded by recommending its findings be used to inform the design of services and interventions provided to Iranian immigrants. Given the challenges reported by the participants in the Comments Measure of this study (i.e., professional, and financial difficulties, language barrier, difficulties with fitting in) the impact on mental health is understandable. It is a common reaction to feel sad when one experiences a loss or feel anxious when one is faced with uncertainties in a new environment. This external stress, however, is likely coupled with the individual's own pre-existing susceptibilities which bring

about mental health distress. This consideration is in line with the diathesis-stress model, which can be used to explain the emergence of mental health issues. Regarding this model, Monroe and Simons (1991) indicate, “the basic premise is that stress activates a diathesis, transforming the potential of predisposition into the presence of psychopathology” (p. 406). Monroe and Simons (1991) advocate for better specification of the potential diatheses, stressors, and how they relate in distinct psychopathologies such as depression.

One potential environmental stressor that can be addressed is to help immigrants gain professional qualification. The Shishehgar et al. (2015) literature review of various studies also highlighted employment as a contributing factor to Iranian immigrants' mental health. More government resources may need to be invested in facilitating foreign trained professionals to become qualified in their respective fields in a Canadian setting, done in a more efficient way. Moghissi et al. (2009), focusing on different immigrant groups including Iranians, make a similar point regarding the obstacles faced by immigrant professionals (such as doctors and engineers). The authors express, “because of tough requirements for entry into these professions in Canada, and the lack of recognition of the educational credentials of these individuals, many of them cannot practice their professions in this country” (Moghissi et al., 2009, p.156). Working in a field that one is trained and experienced in will not only help immigrants feel more competent but will also benefit the society at large by utilizing everyone’s talents and skills for its betterment. Another way to improve mental health of immigrants is to offer free (or reduced fee) psychological services for immigrants in English as well as their native language to facilitate access to support when needed. Robert and Gilkinson (2012) point to Across Boundaries as an example of an agency that provide accessible services to individuals from varied backgrounds. The website for Across Boundaries indicates that the agency is “committed to providing

Dignified, inclusive and compassionate mental health and addiction services for all racialized communities” (Across Boundaries, n.d., para. 3). According to their webpage (Across Boundaries, n.d.), services are delivered in various languages (Farsi is also listed as one of the languages). Services offered by agencies such as Across Boundaries can be highly impactful. Psychological support provided at the right time can provide a buffer against the experienced stress and provide a more favourable context for immigrants to adjust to their new environment.

Additionally, the results of Hypothesis 2 showed some evidence that mental health distress was significantly higher for females.¹⁶ Past studies from different countries have pointed to a similar pattern with regards to gender and psychological difficulties. For instance, a study by Kardi et al. (2007) conducted in Morocco, found higher rates of various anxiety disorders amongst women. For example, there was a 4.3% rate of general anxiety disorder in their sample and most individuals (91.1%) presenting with the disorder were women. Similarly other studies from the United States (Weissman, 1987) and Saudi Arabia (Becker, 2004) have pointed to higher rates of depression in females. The study by Becker (2004) also found higher rates of somatization for women.

In Hypothesis 3, the relationship between we-ness and relationship satisfaction was explored via a regression model. The model utilized the We-ness Questionnaire and the Relationship Strength Measure as predictors and a measure of relationship satisfaction as the dependent variable (RRAS), while controlling for two demographic variables (age and years in a relationship with partner). The overall regression model was significant and explained 56% of

¹⁶ As noted earlier in the results section, the regression diagnostics performed pointed to two potential influential outliers. With the removal of the cases the gender variable no longer reached the threshold for significance testing ($B = -5.02, t = -1.80, p = .076, sr^2 = .02$).

variance in relationship satisfaction. Specifically, the model showed that higher we-ness was predictive of higher relationship satisfaction.

The proportion of unique variance in relationship satisfaction explained by we-ness (as measured via the We-ness Questionnaire) was 38% which is substantial and merits attention. This finding is in line with prior studies of SCCT, a couple therapy intervention focused on enhancing the couple's level of we-ness, which have also provided evidence for the positive impact of we-ness on relationship quality (Reid et al., 2006). These findings are not surprising as we-ness could be perceived as the process by which a good relationship outcome can be expected. As mentioned previously, we-ness is akin to a psychological schema and way of experiencing the world from a shared perspective. Specifically, it requires a nuanced understanding of one's self, one's partner and the reciprocal interaction between the partners (Reid et al., 2008). As highlighted in Reid et al. (2006), what is key is that this shared perspective reduces the partner's tendency to make meaning out of experiences from a narrow egocentric perspective and instead gives access to a more comprehensive viewpoint. Importantly, this broader perspective allows partners to not only understand each other better but also appreciate and support each other's differences. It is as though the closer the partners become the more their individuality, may be expressed (Reid et al., 2006). Clearly, given this central role of we-ness in relationship satisfaction, efforts (i.e., therapy, workshops) to enhance the immigrant couples' we-ness would have considerable impact on their relationship.

The results of Hypothesis 3 also showed that age significantly predicted unique variance in relationship satisfaction. Specifically, the association was negative, such that younger age was predictive of higher relationship satisfaction. This negative association between age and relationship satisfaction was evident in the regression model even after controlling for other

factors (such as years in a relationship with one's partner). One possibility is that the results may be pointing to a cohort effect such that younger Iranians' relationship values may be closer to what is captured by the relationship satisfaction scale used in this study (RRAS). Specifically, the RRAS is derived from the ENRICH Marital Satisfaction (EMS) scale (Fowers & Olson, 1993) which was developed in the West. The application of psychological research and Western derived scales to other cultures, however, is debated and may pose a challenge. For example, previously Arnett (2008) has highlighted that even though Americans constitute a very small fraction of the world's global population, research appearing in APA journals are mostly based on them. This is problematic since notions such as those regarding marriage are very much influenced by culture (Al-Darmaki et al., 2016; Arnett, 2008). In fact, researchers such as Al-Darmaki et al. (2016) have created and validated a specific marital satisfaction scale to be used with their own population in United Arab Emirates. Future studies with Iranians, may also benefit from incorporating a scale that is created and validated with this group and captures Iranian-specific ideas and beliefs regarding relationship satisfaction.

In Hypothesis 4, the relationship between immigration stress and relationship satisfaction was explored via a regression model. The model included three measures of immigration stress as the predictors (ISM, MMRS, HS), one measure of relationship satisfaction as the dependent variable (RRAS) and controlled for two demographic variables (age and years in relationship with partner). The overall regression model was significant and predicted 29% of unique variance in relationship satisfaction. Specifically, the model showed that higher immigration stress was predictive of lower relationship satisfaction.

Of note is the higher reported immigration stress as measured via the Majority-Minority Relations Survey (MMRS) predicting 5% of unique variance in lower reported relationship

satisfaction. The significant negative impact of stress on relationship satisfaction is understandable. When one is under pressure and overwhelmed with challenges, there is a tendency to rely on one's own personal ways to cope (Reid et al., 2006). Additionally, there may be a heightened sensitivity to the mismatches between one's own and the partner's personality (Reid et al., 2006). Incongruencies may be experienced as hurtful and contribute to dismissal of one's partner's ways of being in the attempt to find the resources to cope (Reid et al., 2006). This turning inward, however, may be a challenge to an intimate relationship.

Additionally, the demographic variable age, predicted unique variance in relationship satisfaction such that younger age was associated with higher relationship satisfaction (See Hypothesis 3 for a prior discussion of this observed relationship between age and relationship satisfaction).

In Hypothesis 5, the relationship between mental health distress and relationship satisfaction was explored. The regression model included mental health distress (measured via BSI) as the predictor variable, relationship satisfaction (measured via RRAS) as the dependent variable and controlled for two significant demographic variables (age and years in a relationship with partner). The overall regression model was significant and predicted 20% of variance in relationship satisfaction. Specifically, the model showed that higher mental health distress was predictive of lower relationship satisfaction.

Of note, higher mental health distress predicted 7% of unique variance in lower relationship satisfaction. This finding is not surprising as the emotional, behavioural, and cognitive processes associated with mental health problems would likely make it challenging for a person to draw satisfaction from their relationship with their partner. For example, someone who is depressed may feel sad, isolate him/herself, and exhibit distortions in thinking which

taken together can be detrimental in an intimate relationship. Some of the past studies have shown that depression leads to lesser marital satisfaction in men (Fincham et al., 1997) and women (Davila et al., 1997). Furthermore, being a partner to a person who is experiencing mental health distress may also be challenging. For example, prior research by Tower and Kasl (1995) has shown an association between depression symptoms of older couple members. Specifically, one of the findings from this research was that a partner's depression level contributed to the other partner's depression score even after considering and accounting for other factors that may be related to the individual's depression such as demographic and health variables (Tower & Kasl, 1995).

As mentioned earlier, mental health distress is an emergent phenomenon and often the result of a host of factors working together in concert. The immigration experience can be considered as a potential social/environmental risk factor that may interact with other variables to bring about mental health issues. For example, in the open-ended Comments Measure utilized in this study, many participants had highlighted missing their close bonds in Iran (i.e., family, friends) as the result of immigration. Such sense of loss and lack of social support can render individuals more vulnerable to distress. For example, Fenta et al. (2004) studied the contributors to depression in a sample of 342 Ethiopian immigrants and refugees in Toronto. Some of the factors considered in this study included premigration stressors, postmigration stressors and social support. The study showed that emotional social support was amongst the factors related to lower depression in the studied sample. Shishehgar et al. (2015) also highlighted the impact of social support on the mental health of Iranian immigrants.

The demographic variable age also predicted unique variance in relationship satisfaction such that decrease in age predicted increase in relationship satisfaction (for further discussion of this association see Hypothesis 3).

Exploratory Mediation Analyses Findings

As presented earlier in the Results section, a total of six mediation analyses were conducted and the mediation was statistically significant for two of the models. A summary of these six mediation results is presented in Figure 7. The juxtaposition of these six analyses provides a clearer picture of the findings. The 3 mediations depicted in the top row of Figure 7 pertain to the impact of immigration stress on *relationship satisfaction* as measured by the RRAS measure. The 3 mediations, shown in the bottom row of Figure 7, pertain to the impact of immigration stress on *mental health distress* as measured by the BSI questionnaire.

In Figure 7 (left corner of the top row), the mediation analysis shows that the relationship between immigration stress and relationship satisfaction ($B = -.46, p < .001$) is reduced ($B = -.20, p = .011$) by the inclusion of the we-ness scores. The indirect effect for this model was tested using the Sobel test and the result was statistically significant ($z = -2.98, p = .003$). Thus, the inclusion of the respondents' we-ness scores partially mediated the relationship between higher immigration stress and lower relationship satisfaction. Figure 7 (middle of the top row) also depicts that the initial impact of immigration stress on relationship satisfaction ($B = -.46, p < .001$) is reduced ($B = -.20, p = .038$) by the inclusion of attachment avoidance as a mediator. The test of indirect effect for this model was also statistically significant ($z = -4.47, p < .001$). Thus, attachment avoidance also partially mediated the relationship between immigration stress and relationship satisfaction. In contrast, Figure 7 (right corner of the top row) shows that attachment anxiety did not mediate the relationship between immigration stress and relationship satisfaction.

Hence, the overall results showed that immigration stress has a negative impact on relationship satisfaction and the effect can be partially explained through the mediating role of both attachment avoidance and we-ness.

Based on the significant mediation results (in the first row of Figure 7), it appears that when faced with immigration stress because of interaction with members of the majority group, those couple members whose sense of self incorporates more identification with their relationship (i.e., we-ness) and less attachment avoidance, are more protected against stress and are more able to find satisfaction in their relationship with their partner. Thus, the importance of such mediation analyses. Nonetheless, these are speculative inferences derived from careful analyses of the data. These data-based speculations could inform the design of longitudinal research studies to further our understanding of the stressful impact of immigration.

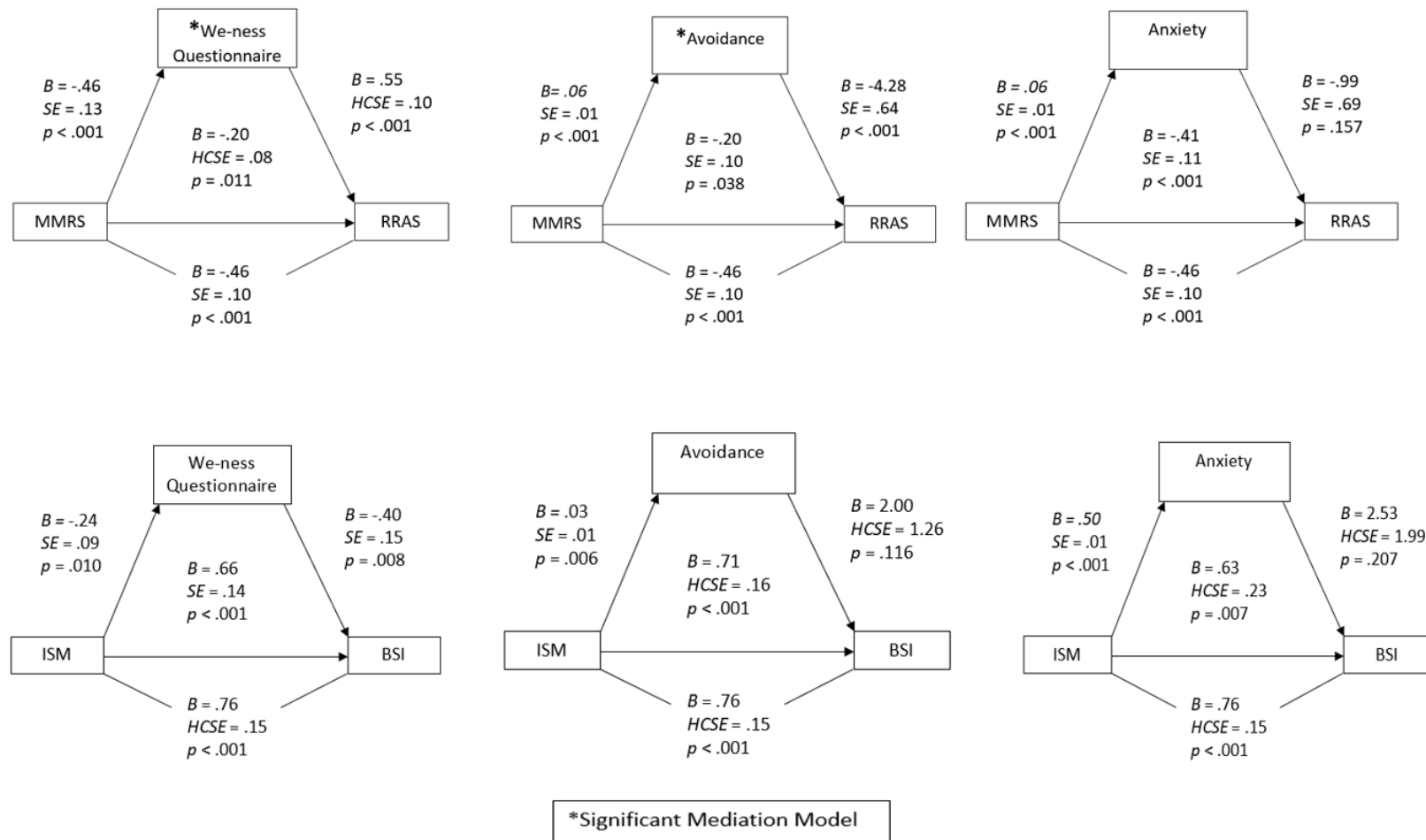
Additionally, it is important to keep in mind that the impact of immigration stress on relationship satisfaction (depicted in the top row of Figure 7 and discussed above) was measured using the MMRS scale as a measure of stress. The items of this scale used for the purposes of this study mainly explored the stress that Iranian immigrants experience in their interaction with the majority group members. Related to this, prior work has also pointed to the impact of stigma (Doyle & Molix, 2014b) and discrimination (Bryant et al., 2010; Doyle & Molix, 2014a) on romantic relationships. For example, Doyle and Molix (2014a) conducted two studies with minority groups (racial and sexual minorities) living in the United States. Their investigation showed that greater perception of discrimination was associated with lower reported relationship quality of participants in both of their studies. Furthermore, they found self-image to be a partial mediator in this association and a path through which discrimination impacts relationships. Specifically, perception of discrimination can be harmful to one's self-image and this in turn

negatively impacts relationship quality. Given that self-image was a partial mediator, however, the researchers also recommended future studies to explore other possible factors that may mediate the observed relationship between discrimination and relationship quality.

Finally, to better understand the impact of immigration stress on mental health distress (see the bottom row of Figure 7), analyses were done to explore the potential mediating role of we-ness and attachment respectively. The evidence for we-ness as a mediator in the relationship was in the predicted direction but did not quite meet the threshold for significance testing (Sobel Test Statistic = 1.89, $p = .059$). As for attachment anxiety and avoidance, the results did not provide support for their role as a mediator in the relationship between immigration stress and responses on the mental health measure. Given the importance of understanding the mechanisms through which immigration stress impacts mental health further studies will need be conducted in the future.

Figure 7

Summary of Mediation Analyses



Note. MMRS = Majority Minority Relations Survey; RRAS = Revised Relationship Assessment; ISM = Immigration Stress Measure;

BSI = Brief Symptoms Inventory. HCSE = heteroscedasticity-consistent standard error.

Key Strengths and Limits of This Study

One of the strengths of this study was that various scales were utilized to measure immigration related stress with the aim to understand its relationship more comprehensively with other key variables (i.e., mental health, relationship satisfaction). Specifically, a total of three scales were used to measure immigration related stress. Two of these scales (HS, MMRS) were pre-existing measures that were chosen for use in this study. These measures were reviewed and some of their items (that fit the current study's purposes) were selected. Additionally, a third measure (ISM) was created for this study based on this researcher's knowledge about immigration stress experienced in the Iranian community.

Of the three measures used, the items for two (MMRS, ISM) were mostly related to immigration stress as experienced in relation with the members of the mainstream culture. In contrast, the items for one measure (HS) were mostly related to immigration stress experienced in interaction with members of one's ethnic (original) culture. This study's results showed that this differentiation between the kinds of immigration stress is a useful one. Based on the results, higher immigration stress as experienced in relation with members of the host culture (as distinct from members of one's own ethnic group), was more strongly associated with outcome variables of interest (i.e., lower mental health and lower relationship satisfaction). This finding is valuable as it may be used to guide and inform the efforts that are made by the government and related immigration agencies. An example of a helpful program listed on the Canadian government's website is the *Community Support, Multiculturalism, and Anti-Racism Initiatives Program* which aims to nurture "Canada's strength as a diverse and inclusive society" (Department of Canadian Heritage, 2020, para. 1). This program provides monetary support to different initiatives that are aligned with its goals and the website lists the steps for application (Department of Canadian

Heritage, 2020). It would be helpful for further programs and resources to be geared specifically towards building more proactive (stress mitigating) bridges between the immigrant and host members. Knowledge, understanding, and familiarity with different cultures can be cultivated through various media, workshops, and the education system. These investments in reducing immigration stress are beneficial for everyone in the community because it contributes to a better quality of life for immigrants (i.e., better mental health and more relationship satisfaction) and enables them to more fully use their skills to contribute to their new country.

Another strength of the current study was the utilization of a recently developed We-ness Questionnaire by Topcu-Uzer et al. (2020). The authors of the measure aimed for the scale to assess the construct of we-ness in an efficient and comprehensive manner. The psychometric properties of the measure were established using a sample of 434 Americans (Topcu-Uzer et al., 2020). The current study provided further support for the usefulness of this measure with a different cultural group. This result is promising as such finding supports the idea that we-ness is at the essence of relationship satisfaction. Findings from the current study also support how such a scale can provide useful information to both researchers and clinicians when attempting to assess or improve the relationship quality of couples (Topcu-Uzer et al., 2020). A self-report measure of we-ness with strong psychometric properties can quickly provide information about the couple's current level of functioning (baseline) and can be utilized intermittently to assess for change (for example, when used in therapy).

Another key attribute of this study that should be highlighted is the sample of participants. Specifically, while psychological research is often conducted with younger undergraduate students, the participants for this research were recruited from the wider Iranian-Canadian community. This decision to recruit from the wider community resulted in more

diversity in the sample and was reflected in the wide range for the demographic variables such as the sample's age (20-83), years living in Canada (1-46), and years in a relationship with partner (1-49). However, there were also some limits associated with the current sample in terms of its representativeness of the Iranian immigrants. For example, this was a convenience sample of Iranian-Canadians and the participants were recruited through the researcher's network (and their respective networks) in the Iranian community. Convenience samples can be limited in their representativeness and care should be taken when making inferences to all immigrants from the results. Also, the scales used in this study were in English. As such, only Iranian immigrants who were adequately proficient in English could participate in this research. Language skills impact one's adjustment in a new country (including one's ability to work and study). As such, the reported challenges by the current study sample may be different, or differ in intensity, from a group of Iranian immigrants who do not speak English. It would be beneficial for future studies to include parallel/comparable scales that are written in both languages (English and Farsi) to facilitate the participation and inclusion of a more diverse group of Iranian immigrants.

Furthermore, in this study, proficiency in English was not formally assessed which limits the ability to gauge the respondents' accuracy in understanding the scales. The participants in this study differed in terms of the number of years they had lived in Canada (ranging from 1-46 years). The varied duration of time in Canada, may contribute to some participants being more proficient in English and better able to read and understand the English scales used in this study. Future studies may benefit from formally assessing the language skills of the respondents as part of the research.

Moreover, as mentioned in the Method section, modifications were made to many of the measures due to various reasons including the need to keep the measures brief, appropriate for

the immigrant sample of the study, and relevant to the goals of the current research. However, such changes pose a limit on the inferences that can be made from the scales and the results should be interpreted with caution.

As well, the intention of this study was to have the questionnaires completed by individuals (who were in a relationship) separately and the statistical analyses used in the study assume independence of data. However, a limit of this study is that the respondents were not explicitly asked to complete the questionnaires independently or for only one member per household to participate in the research. While it is difficult to fully eliminate such problems when data is obtained through anonymous surveys, it will be important for future research to include such guidelines for the participants.

As well, given the previously mentioned non-probability sampling method (snowball sampling) and language of the measures used (only English) there is a potential that the results may not be representative of those who were not able to participate in the research. For example, as mentioned previously, proficiency in the language of the host country is more likely to be connected to better outcomes for immigrants such as the ability to obtain employment. By using only English measures in this study, the immigration experiences of those Iranians who are not proficient in English (and as a result are likely to find immigration more challenging) may not have been captured.

Additionally, this study was focused on the Iranian immigrant group. In the future, the inclusion of more cultural groups within the same study could be considered to build a broader understanding of immigration related stress for immigrants from various countries/cultures and its implications. Specifically, such research would make it possible to investigate whether the kinds of stress reported is specific to a particular group or common across various groups. For

example, the current study showed that stress as experienced in interaction with members of the host culture is more impactful for Iranians than the stress experienced with members of one's own ethnic group. It would be valuable to see if similar pattern of results are observed when studying other cultural groups. Also, by including multiple cultural groups, it would be possible to investigate if a certain immigrant group is particularly at risk (i.e., is reporting more stress than others) and the potential reasons for it (i.e., drastic contrast in values of the ethnic and host cultures). The information gained can then be used to further guide government policies and efforts to facilitate the overall immigration process.

Finally, the data obtained in this study were from individuals who were in a relationship. Obtaining data from both members of the couple in future studies would further enhance the findings. For example, the current research showed that higher reported immigration stress is negatively associated with relationship satisfaction. Couple data would allow the exploration of additional queries such as whether the alignment in the reported stress levels of the partners also impacts their relationship satisfaction. Specifically, it is possible that a closer match between the partners' experience of stress would allow them to offer more understanding, empathy and support to each other and reduce the negative impact on their relationship. Utilizing couple data and the ability to compare the partners' responses on variables of interest, adds another valuable layer of important information to any research focused on relationships.

Conclusion

Immigration and starting over in a new country, is often a challenging experience especially when the customs, values, and cultures of the two countries are drastically different. This study was a step towards a better understanding of the challenges experienced by Iranian immigrants and its impact on important areas of life (such as, their relationship quality and

mental health). This study also investigated how two central relational schemas, which are attachment and we-ness, may influence and buffer the faced adversities. This was deemed a valuable line of investigation as it sheds light on how to help build psychological resiliency for immigrants. The idea that relationships play a vital role in a person's functioning is vividly captured by Bowlby (1973):

For not only young children, it is now clear, but human beings of all ages are found to be at their happiest and to be able to deploy their talents to best advantage when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise. The person trusted provides a secure base from which his (or her) companion can operate. (p. 359)

It is hoped that future studies will continue to provide an understanding of both the stress and resilience factors involved in the immigration process.

References

- Across Boundaries. (n.d.). *What we do*. <https://acrossboundaries.ca/what-we-do/>
- Ahmadi, N. (2003). Rocking sexualities: Iranian migrants' views on sexuality. *Archives of Sexual Behavior*, 32(4), 317–326. <https://doi.org/10.1023/A:1024038931202>
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Lawrence Erlbaum Associates.
- Al-Darmaki, F. R., Hassane, S. H., Ahammed, S., Abdullah, A. S., Yaaqeib, S. I., & Dodeen, H. (2016). Marital satisfaction in the United Arab Emirates: Development and validation of a culturally relevant scale. *Journal of Family Issues*, 37(12), 1703–1729. <https://doi.org/10.1177/0192513X14547418>
- Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist*, 63(7), 602–614. <https://doi.org/10.1037/0003-066X.63.7.602>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173–1182. <https://doi.org/10.1037//0022-3514.51.6.1173>
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7(2), 147–178. <https://doi.org/10.1177/0265407590072001>
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226–244. <https://doi.org/10.1037/0022-3514.61.2.226>

- Berry, J. W. (2006). Stress perspectives on acculturation. In D. L. Sam, & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 43–57). Cambridge University Press. <https://doi.org/10.1017/CBO9780511489891.007>
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. Basic Books.
- Bowlby, J. (1977). The making and breaking of affectional bonds: I. Aetiology and psychopathology in the light of attachment theory. *The British Journal of Psychiatry*, *130*, 201–210. <https://doi.org/10.1192/bjp.130.3.201>
- Bowlby, J. (1980). *Attachment and loss: Vol.3. Sadness and depression*. Basic Books.
- Brassard, A., Shaver, P. R., & Lussier, Y. (2007). Attachment, sexual experience, and sexual pressure in romantic relationships: A dyadic approach. *Personal Relationships*, *14*(3), 475–493. <https://doi.org/10.1111/j.1475-6811.2007.00166.x>
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). Guilford Press.
- Bryant, C. M., Wickrama, K. A. S., Bolland, J., Bryant, B. M., Cutrona, C. E., & Stanik, C. E. (2010). Race matters, even in marriage: Identifying factors linked to marital outcomes for African Americans. *Journal of Family Theory & Review*, *2*(3), 157–174. <https://doi.org/10.1111/j.1756-2589.2010.00051.x>
- Cassidy, J., & Shaver, P. R. (Eds.). (2016). *Handbook of attachment: Theory, research, and clinical applications* (3rd ed.). Guilford Press.

- Chaichian, M. A. (1997). First generation Iranian immigrants and the question of cultural identity: The case of Iowa. *International Migration Review*, 31(3), 612–627.
<https://doi.org/10.1177/019791839703100304>
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58(4), 644–663.
<https://doi.org/10.1037/0022-3514.58.4.644>
- Crowell, J. A., Fraley, R. C., & Roisman, G. I. (2016). Measurement of individual differences in adult attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 598–635). Guilford Press.
- Dalton, J. E. (2001). *Self-construing as integral to the quality of marital relationships: Ongoing dynamics of self-other discourse* (Publication No. MQ67724) [Master's thesis, York University]. ProQuest Dissertations & Theses Global.
- Darvishpour, M. (2002). Immigrant women challenge the role of men: How the changing power relationship within Iranian families in Sweden intensifies family conflicts after immigration. *Journal of Comparative Family Studies*, 33(2), 271–296.
<https://doi.org/10.3138/jcfs.33.2.271>
- Davila, J., Bradbury, T. N., Cohan, C. L., & Tochluk, S. (1997). Marital functioning and depressive symptoms: Evidence for a stress generation model. *Journal of Personality and Social Psychology*, 73(4), 849–861. <https://doi.org/10.1037/0022-3514.73.4.849>
- Department of Canadian Heritage. (2020, November 23). *Community support, multiculturalism, and anti-racism initiatives program*. Government of Canada. Retrieved June 22, 2022, from <https://www.canada.ca/en/canadian-heritage/services/funding/community-multiculturalism-anti-racism.html>

- Derogatis, L. R. (1993). *BSI Brief Symptom Inventory: Administration, scoring, and procedures manual*. National Computer Systems.
- Derogatis, L. R., & Cleary, P. A. (1977). Confirmation of the dimensional structure of the SCL-90: A study in construct validation. *Journal of Clinical Psychology*, *33*(4), 981–989. [https://doi.org/10.1002/1097-4679\(197710\)33:4<981::aid-jclp2270330412>3.0.co;2-0](https://doi.org/10.1002/1097-4679(197710)33:4<981::aid-jclp2270330412>3.0.co;2-0)
- Doyle, D. M., & Molix, L. (2014a). How does stigma spoil relationships? Evidence that perceived discrimination harms romantic relationship quality through impaired self-image. *Journal of Applied Social Psychology*, *44*(9), 600–610. <https://doi.org/10.1111/jasp.12252>
- Doyle, D. M., & Molix, L. (2014b). Love on the margins: The effects of social stigma and relationship length on romantic relationship quality. *Social Psychological and Personality Science*, *5*(1), 102–110. <https://doi.org/10.1177/1948550613486677>
- Edelstein, R. S., & Shaver, P. R. (2004). Avoidant attachment: Exploration of an oxymoron. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 397–412). Lawrence Erlbaum Associates, Publishers.
- Fenta, H., Hyman, I., & Noh, S. (2004). Determinants of Depression Among Ethiopian Immigrants and Refugees in Toronto. *The Journal of Nervous and Mental Disease*, *192*(5), 363–372. <https://doi.org/10.1097/01.nmd.0000126729.08179.07>
- Fergus, K. D., & Reid, D. W. (2001). The couple's mutual identity and reflexivity: A systemic-constructivist approach to the integration of persons and systems. *Journal of Psychotherapy Integration*, *11*(3), 385–410. <https://doi.org/10.1023/A:1016658301629>

- Fincham, F. D., Beach, S. R. H., Harold, G. T., & Osborne, L. N. (1997). Marital satisfaction and depression: Different causal relationships for men and women? *Psychological Science*, 8(5), 351–357. <https://doi.org/10.1111/j.1467-9280.1997.tb00424.x>
- Fiske, S. T., & Linville, P. W. (1980). What does the schema concept buy us? *Personality and Social Psychology Bulletin*, 6(4), 543–557. <https://doi.org/10.1177/014616728064006>
- Fowers, B. J., & Olson, D. H. (1993). ENRICH Marital Satisfaction Scale: A brief research and clinical tool. *Journal of Family Psychology*, 7(2), 176–185. <https://doi.org/10.1037/0893-3200.7.2.176>
- Ghaffarian, S. (1989). *The acculturation of Iranian immigrants in the United States and the implications for mental health* (Publication No. 8922993) [Doctoral dissertation, California School of Professional Psychology - Los Angeles]. ProQuest Dissertations & Theses Global.
- Hanassab, S., & Tidwell, R. (1993). Change in the premarital behavior and sexual attitudes of young Iranian women: From Tehran to Los Angeles. *Counselling Psychology Quarterly*, 6(4), 281–289. <https://doi.org/10.1080/09515079308254122>
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, 39(4), 709-722. <https://doi.org/10.3758/BF03192961>
- Hazan, C., & Shaver, P. (1987). Romantic Love Conceptualized as an Attachment Process. *Journal of Personality and Social Psychology*, 52(3), 511–524. <https://doi.org/10.1037/0022-3514.52.3.511>
- Hojat, M., Shapurian, R., Foroughi, D., Nayerahmadi, H., Farzaneh, M., Shafieyan, M., & Parsi, M. (2000). Gender differences in traditional attitudes toward marriage and the family: An

- empirical Study of Iranian immigrants in the United States. *Journal of Family Issues*, 21(4), 419–434. <https://doi.org/10.1177/019251300021004001>
- Hojat, M., Shapurian, R., Nayerahmadi, H., Farzaneh, M., Foroughi, D., Parsi, M., & Azizi, M. (1999). Premarital sexual, child rearing and family attitudes of Iranian men and women in the United States and in Iran. *The Journal of Psychology: Interdisciplinary and Applied*, 133(1), 19–31. <https://doi.org/10.1080/00223989909599719>
- La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, 79(3), 367–384. <https://doi.org/10.1037/0022-3514.79.3.367>
- Lavy, S., Mikulincer, M., & Shaver, P. R. (2010). Autonomy–proximity imbalance: An attachment theory perspective on intrusiveness in romantic relationships. *Personality and Individual Differences*, 48(5), 552–556. <https://doi.org/10.1016/j.paid.2009.12.004>
- Lay, C., & Nguyen, T. (1998). The role of acculturation-related and acculturation non-specific daily hassles: Vietnamese-Canadian students and psychological distress. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, 30(3), 172–181. <https://doi.org/10.1037/h0087060>
- Lohr, S. L. (2010). *Sampling: Design and analysis* (2nd ed.). Brooks/Cole.
- Mahdavi, A. (2012). *Cultural Life Styles Inventory for Iranian-American Adults Administration and Scoring Booklet Version 1.0* [Inventory obtained from the author].
- Mendoza, R. H. (1989). An empirical scale to measure type and degree of acculturation in Mexican-American adolescents and adults. *Journal of Cross Cultural Psychology*, 20(4), 372–385. <https://doi.org/10.1177/0022022189204003>

- Mendoza, R. H., & Martinez, J. L. (1981). The Measurement of Acculturation. In A. Baron (Ed.), *Explorations in Chicano psychology* (pp. 71–82). Praeger.
- Mesman, J., van IJzendoorn, M. H., & Sagi-Schwartz, A. (2016). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 852–877). Guilford Press.
- Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology, 61*(2), 321–331.
<https://doi.org/10.1037/0022-3514.61.2.321>
- Moghissi, H. (1999). Away from home: Iranian women, displacement cultural resistance and change. *Journal of Comparative Family Studies, 30*(2), 207–217.
<https://doi.org/10.3138/jcfs.30.2.207>
- Moghissi, H., Rahnema, S., & Goodman, M. J. (2009). *Diaspora by design: Muslim immigrants in Canada and beyond*. University of Toronto Press.
- Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress research: Implications for the depressive disorders. *Psychological Bulletin, 110*(3), 406–425. <https://doi.org/10.1037/0033-2909.110.3.406>
- Namazi, S. (2014). *Ethnic-racial socialization, perceived discrimination, and overall functioning among Iranian American youth* (Publication No. AAI3610764) [Doctoral dissertation, California School of Professional Psychology, Alliant International University]. APA PsycInfo.
- Nguyen, T. T. (2000). *Self-constructions as mediating and additive effects on perceptions of conflict resolution strategies and relationship satisfaction: Interdependent and*

- independent self-construals* (Publication No. MQ56194) [Master's thesis, York University]. ProQuest Dissertations & Theses Global.
- Pistole, C. M. (1994). Adult attachment styles: Some thoughts on closeness-distance struggles. *Family Process*, 33(2), 147–159. <https://doi.org/10.1111/j.1545-5300.1994.00147.x>
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, 38(1), 149–152.
<https://doi.org/10.1525/aa.1936.38.1.02a00330>
- Reid, D. W., & Ahmad, S. (2015). Identification with the relationship as essential to marital resilience: Theory, application, and evidence. In K. Skerrett, & K. Fergus (Eds.), *Couple resilience: Emerging perspectives* (pp. 139–161). Springer Science + Business Media.
https://doi.org/10.1007/978-94-017-9909-6_8
- Reid, D. W., Dalton, E. J., Laderoute, K., Doell, F. K., & Nguyen, T. (2006). Therapeutically induced changes in couple identity: The role of we-ness and interpersonal processing in relationship satisfaction. *Genetic, Social, and General Psychology Monographs*, 132(3), 241–284. <https://doi.org/10.3200/MONO.132.3.241-288>
- Reid, D. W., Doell, F. K., Dalton, E. J., & Ahmad, S. (2008). Systemic-constructivist couple therapy (SCCT): Description of approach, theoretical advances, and published longitudinal evidence. *Psychotherapy: Theory, Research, Practice, Training*, 45(4), 477–490. <https://doi.org/10.1037/a0014334>
- Robert, A.-M., & Gilkinson, T. (2012). *Mental health and well-being of recent immigrants in Canada: Evidence from the longitudinal survey of immigrants to Canada (LSIC)*. Immigration, Refugees and Citizenship Canada. <https://www.canada.ca/en/immigration->

[refugees-citizenship/corporate/reports-statistics/research/mental-health-well-being-recent-immigrants-canada-evidence-longitudinal-survey-immigrants-canada-lsic.html](https://www.refugees-citizenship.com/corporate/reports-statistics/research/mental-health-well-being-recent-immigrants-canada-evidence-longitudinal-survey-immigrants-canada-lsic.html)

Saedi, G. A. (2010). Addressing the paucity of psychological scholarship conducted with Iranian populations: A preliminary review of Iranian mental health research in the United States. *Journal of Muslim Mental Health*, 5(2), 137–159.

<https://doi.org/10.1080/15564908.2010.487717>

Safdar, S. F. (1998). *An extended model of acculturation process: Study of Iranian immigrants in Canada* (Publication No. MQ33508) [Master's thesis, York University]. ProQuest Dissertations & Theses Global.

Schoenborn, C. A. (2004). *Marital status and health: United States, 1999-2002* (Advance Data from Vital and Health Statistics, 351). National Center for Health Statistics.

<https://www.cdc.gov/nchs/data/ad/ad351.pdf>

Shishehgar, S., Gholizadeh, L., DiGiacomo, M., & Davidson, P. M. (2015). The impact of migration on the health status of Iranians: An integrative literature review. *BMC International Health and Human Rights*, 15(1), 20. <https://doi.org/10.1186/s12914-015-0058-7>

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290–312. <https://doi.org/10.2307/270723>

Sodowsky, G. R., Lai, E. W., & Plake, B. S. (1991). Moderating effects of sociocultural variables on acculturation attitudes of Hispanics and Asian Americans. *Journal of Counseling & Development*, 70(1), 194–204. <https://doi.org/10.1002/j.1556-6676.1991.tb01583.x>

Sodowsky, G. R., & Plake, B. S. (1991). Psychometric properties of the American-International Relations Scale. *Educational and Psychological Measurement, 51*(1), 207–216.

<https://doi.org/10.1177/0013164491511020>

Tohidi, N. (1993). Iranian women and gender relations in Los Angeles. In R. Kelly, J. Friedlander, & A. Colby (Eds.), *Iranegles Iranians in Los Angeles* (pp. 175-217). University of California Press.

Topcu-Uzer, C., Randall, A. K., Vedes, A. M., Reid, D., & Bodenmann, G. (2020). We-ness questionnaire: Development and validation. *Journal of Couple & Relationship*

Therapy, 1-23. <https://doi.org/10.1080/15332691.2020.1805082>

Tower, R. B., & Kasl, S. V. (1995). Depressive symptoms across older spouses and the moderating effect of marital closeness. *Psychology and Aging, 10*(4), 625–638.

<https://doi.org/10.1037/0882-7974.10.4.625>

Appendices

Appendix A: Additional Hypothesis not Investigated

One of goals in this study was to investigate the relationship between attachment styles and acculturation styles using the Experiences in Close Relationships measure (ECR) and the Iranian Cultural Life Styles Inventory (ICLSI) respectively. However, in preparation for the analysis several problems with the ICLSI were identified that would potentially impact the scoring and interpretation from the measure. Specifically, given the identified problems, the conclusions drawn from the measure would be questionable and inadequate in capturing the acculturation styles of the study's sample. By implication, a better (more nuanced) measure is needed in future investigations. A decision was made not to proceed with hypothesis testing using this measure. Below the measure and the challenges encountered in its interpretation for the purposes of this study are described.

Iranian Cultural Life Styles Inventory (ICLSI)

The Iranian Cultural Life Styles Inventory (ICLSI; Mahdavi, 2012) is based on the Cultural Life Styles Inventory (CLSI; Mendoza, 1989). The original CLSI is 29-items and was created to assess the acculturation of Mexican Americans.

While some acculturation theories (and related instruments) only consider how an individual adapts to the host culture, this inventory considers the individual's way of dealing with the original culture he/she came from as well as the host culture (Mendoza, 1989). Specifically, this instrument measures cultural resistance, cultural shift, and cultural incorporation (Mendoza, 1989). First, *cultural resistance* occurs when the individual resists the new culture's customs and maintains the original culture's traditions (Mendoza & Martinez, 1981). Second, *cultural shift* occurs when the individual takes up the host culture's customs and does not adhere to the original

culture (Mendoza & Martinez, 1981). Finally, *Cultural incorporation* occurs when the individual adapts to both the original and host cultures (Mendoza & Martinez, 1981).

Additionally, The Cultural life Style Inventory measures five different dimensions of acculturation: intra familial language, extra familial language, social affiliation and activities, cultural familiarity and activities, and cultural identification and pride. Hence, rather than one generalized score indicating an individual's acculturation type, it is possible to obtain an acculturation profile for an individual where their acculturation style on each dimension could be determined (Mendoza, 1989). For example, a person could show cultural resistance on social affiliation and activities but cultural incorporation on cultural familiarity and activities.

The instrument has acceptable published reliability. Specifically, the published internal consistency Cronbach's alpha ranged from .84 to .91 among the five dimensions of the inventory (Mendoza, 1989). Previously, this measure has also been adapted and administered to the Iranian population living in the United States. When the entire measure was considered (all 29 items) it demonstrated acceptable internal reliability with a Cronbach alpha of .71 (Ghaffarian, 1989).

More recently, Mahdavi (2012) published the Iranian-American Adults version of this inventory (ICLSI) which consisted of 23 items. The administration and scoring booklet of the ICLSI by Mahdavi (2012) was obtained and used in this study. For the purposes of the present study, minor modifications were made to the wording of the scale to make it more appropriate for our sample (i.e., adding a few words and changing (or deleting) all references to the United States). Additionally, one item (which asked about the respondent's preference for the ethnicity of his/her potential marriage partner) was removed from the current scale. The item was removed as it was anticipated that most respondents who will participate in the present study would be married already. Hence, the total scale in this study had 22 items.

Identified Problems

Based on the published scoring criteria of ICLSI (Mahdavi, 2012), each of the items in the scale is given an orientation code by the researcher depending on the way in which the respondent has answered the questions. For example, in the present study, all responses that showed identification with the ethnic culture (in this case Iranian) would be coded as Iranian oriented. All responses that showed identification with the host culture (in this case Canadian) would be coded as Canadian oriented. Lastly, all responses that showed identification with and immersion in both the ethnic and host cultures would be coded as Multi-cultural oriented. Further, based on the scoring criteria, all responses that do not fit in these categories (such as, when the respondent picks the "other" option) are not scored or counted towards the total acculturation score at the end.

One of the concerns with regards to the above specified scoring criteria of the ICLSI was not scoring a respondent's answers when he/she chooses the option "other" was problematic. For example, in the current study, some respondents had picked "other language" as their chosen response to item 12 (i.e., "In what language are the jokes that you are familiar with?"). These respondents had then gone on to specify the other language as "Turkish." While Farsi (Persian) is the official language of Iran, Turkish is also a dominant language in various cities of Iran. Hence, counter to the specified scoring criteria of the ICLSI, any such respondents (who had chosen the answer option "other language") should in fact receive a code indicating an Iranian-oriented response. In the current study, this problem with the scoring of the "other" category occurred with 12 out of the total 22 items in the ICLSI. Specifically, for these 12 items, a range of 1-13 responses (depending on the item) were problematically specified as "other." Example languages

specified in the “other” category by the participants included “Turkish,” “Azari,” and “Arabic” which are all languages spoken in Iran in addition to the official language (Farsi).

Second, the ICLSI assesses five separate factors including intra-family language, extra-family language, social affiliation and activities, cultural familiarity and activities, cultural identification and pride. These factors are reported to be orthogonal and relevant to acculturation. In the current study, there were some concerns about the use of language as a criterion for assessing acculturation. For example, some of the items relevant to the intra-family language factor asked about the language the respondent converses in when talking to others (such as his/her grandparents, parents, siblings, partner, and children). Many of the participants in the current study (all but one) were born in Iran. As such, it is likely that even when they may prefer to speak in English, they would have to adjust and speak in Farsi when talking to a family member (such as, a parent or grandparent) who simply does not speak in English. The scoring criteria associated with the ICLSI would consider such responses as an indication of Iranian-oriented acculturation. However, such conclusion would be difficult to reach especially in situations where there is a lack of choice in the language used and when one's conversational partner does not speak English. For example, in the current sample, based on the ICLSI scoring criteria, 97.5% of the participants responded in an Iranian-oriented manner when asked about the language they used to speak with their grandparents (the other 2.5% also named a language that is spoken in Iran). Moreover, when asked about the language used to converse with their parents, 89.6% of participants responded in an Iranian-oriented manner (another 5.2% also named languages that are spoken in Iran).¹⁷ Again, it is not clear whether these participants' use of an

¹⁷ There was a shift in the total sample size ($N = 108$) as some individuals indicated they did not have grandparents or parents. Hence the percentages are based on the participants who had grandparents ($n = 79$) and parents ($n = 96$) and were able to indicate the language they used to converse with them.

Iranian language to communicate with a family member is an indication of their acculturation or merely the result of lack of choice.

Finally, problems relevant to the wording of some items were detected that may have led to confusion and misinterpretation of the items by the respondents. Specifically, for four of the items (13-16) the terms "Anglo-American"¹⁸ and "Non-Iranian" were used interchangeably. This was problematic as these same items in the ICLSI also aimed to differentiate between Anglo-American (the mainstream culture) and other cultures (cultures that are neither the ethnic nor the dominant culture). As such, these questions were confusing, and the validity of responses derived from these items were questionable.

The decision was made not to proceed with hypothesis testing using the ICLSI.

¹⁸ In the present study "Anglo-American" was changed to "Anglo-Canadian."

Appendix B: Letter to Participants



Hello,

Allow me to introduce myself. My name is Niloufar Eshghi and I am a PhD graduate student in the Clinical Psychology program at York University. As part of my final doctoral thesis requirement I am conducting research on the impact of immigration on the relationship satisfaction of Iranian immigrant couples in Canada.

I am therefore asking if you would kindly take the time to complete my questionnaires. You will receive \$20 for your participation in this research via Interac e-Transfer. The questionnaires should take you approximately 1 hour to complete. **Please note that the questionnaires are completely anonymous** and you are not asked for your name as my only goal is to help make immigration easier for the Iranian community through this research.

Once you are done filling out the questionnaires, please mail it using the provided envelope which is pre-stamped and pre-addressed.

My final research results will be available for anyone who wishes to read or offer feedback. If you have any questions regarding my study please do not hesitate to contact me at [REDACTED] or my Professor, Dr. David Reid at [REDACTED]

In addition, please note that there is also an online version of this questionnaire. If you prefer to complete the questionnaire online (instead of doing the hard copies) please go to the following link:

[REDACTED]

Please feel free to forward this link to your Iranian married friends.

I thank you very much for your time,

Sincerely,

Niloufar Eshghi
 MA, Ph.D. Candidate
 Clinical Psychology
 York University
 4700 Keele Street
 Toronto, ON M3J 1P3

Appendix C: Email to Participants

Hello,

Allow me to introduce myself. My name is Niloufar Eshghi and I am a PhD graduate student in the Clinical Psychology program at York University. As part of my final doctoral thesis I am conducting research on the impact of immigration on the relationship satisfaction of Iranian immigrant couples.

I am therefore asking if you would kindly take the time to fill out my online questionnaire. You will receive \$20 for your participation in this research via Interac e-Transfer. The questionnaires should take you approximately 1 hour to complete. Please note that the questionnaires are completely anonymous, and you are not asked for your name as my only goal is to help make immigration easier for the Iranian community through this research.

My final research results will be available for anyone who wishes to read or offer feedback. Attached to this email is also a document with further information about this research.

To participate in this research please click on the link below.



I thank you very much for your time. Please feel free to forward this email to your married Iranian friends.

Sincerely,

Niloufar Eshghi
MA, Doctoral Candidate
Clinical Psychology
York University
4700 Keele Street
Toronto, ON M3J 1P3

Appendix D: Informed Consent Form

Informed Consent Form

Date:

July 22, 2018

Study Name:

Acculturation and the relationship satisfaction of Iranian immigrant couples in Canada.

Researcher Names:

Principal investigator: Niloufar Eshghi, PhD. Candidate in Clinical Psychology, York University [REDACTED]

Supervisor: Dr. David Reid [REDACTED]

Purpose of the Research:

The aim of this research is to investigate the impact of acculturation on the relationship satisfaction of Iranian immigrant couples in Canada. The questionnaires' data will be used for the researcher's, Niloufar Eshghi, Ph.D. dissertation as partial fulfillment of the requirements for the degree of Doctor of Philosophy. This research is conducted under the supervision of a psychology faculty member, Dr. David Reid, at York University.

What You Will be Asked to Do in the Research:

The participants will complete a set of measures and respond to items on topics such as relationship satisfaction, experienced distress, how one behaves and feels in close relationships, and acculturation. You will receive \$20 as reimbursement for your time. The questionnaires should take approximately 1.5 hours to complete.

Risks and Discomforts:

There are no known risks associated with this study with the exception that a respondent by completing the measures may risk being reminded of information that he/she finds distressing. If this distress were to occur the participant is asked to contact Dr. Reid, a Clinical Psychologist registered with the College of Psychologist of Ontario, to discuss the matter further with him. Alternatively, you can contact the York University Psychology Clinic (YUPC) which is a mental health clinic located at York University at 416-650-8488.

Benefits of the Research and Benefits to You:

The benefit to your participation in this study is that it will contribute to advancing research intended to facilitate the immigration process for the Iranian population and help make it more successful. As well, you will receive \$20 as reimbursement for your time. My final research report/summary and the results will be available for anyone who wishes to read or offer feedback.

Voluntary Participation and Withdrawal:

Your decision not to volunteer, to stop participating, or to refuse to answer particular questions will not influence the nature of the ongoing relationship you may have with the researcher or the study staff, or the nature of your relationship with York University either now, or in the future. If you decide to stop participating, you may withdraw without penalty, financial or otherwise, and you will still receive the promised inducement. Your participation in the study is completely voluntary and you may choose to stop participating at any time. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality:

Confidentiality will be provided to the fullest extent possible under law. Data will be obtained using questionnaires. All the forms will be kept in a locked cabinet in Ms. Eshghi's office located at York University. The data obtained on line will be stored on a USB key which will be password protected. No names will be attached to the data as each participant will receive an ID number. The data will be safely kept under lock for 7 years before it is destroyed in May of 2025.

Only the researchers will have access to this information. Unless you choose otherwise, your name will not be associated with any of your responses on the questionnaires. Only an ID number will be used to identify your answers. All the information you provide during the research will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research.

The data collected in this research may be used-in an anonymized form- by members of the research team in subsequent research investigations exploring similar lines of inquiry. Such projects will still undergo ethics review by the HPRC, our institutional REB. Any secondary use of anonymized data by the research team will be treated with the same degree of confidentiality and anonymity as in the original research project.

The researcher acknowledges that the host of the online survey (e.g., Qualtrix, Survey Monkey, etc) may automatically collect participant data without their knowledge (i.e., IP addresses). Although this information may be provided or made accessible to the researcher, it will not be used or saved without participant's consent on the researchers system. Further, Because this project employs e-based collection techniques, data may be subject to access by third parties as a result of various security legislation now in place in many countries and thus *the confidentiality and privacy of data cannot be guaranteed during web-based transmission.*

Questions About the Research?

If you have questions about the research in general or about your role in the study, please feel free to contact me [REDACTED] or my supervisor, Dr. David Reid [REDACTED]

[REDACTED] You may also contact the Graduate Program in Psychology at 297 Behavioural Science Building, 4700 Keele Street, Toronto, Ontario, M3J 1P3 and/or (416)-736-5290.

This research has received ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Appendix E: Experiences in Close Relationships

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree Strongly			Neutral/ Mixed			Agree Strongly

1. I prefer not to show a partner how I feel deep down. _____
2. I worry about being abandoned. _____
3. I am very comfortable being close to romantic partners. _____
4. I worry a lot about my relationships. _____
5. Just when my partner starts to get close to me I find myself pulling away. _____
6. I worry that romantic partners won't care about me as much as I care about them. _____
7. I get uncomfortable when a romantic partner wants to be very close. _____
8. I worry a fair amount about losing my partner. _____
9. I don't feel comfortable opening up to romantic partners. _____
10. I often wish that my partner's feelings for me were as strong as my feelings for him/her. _____
11. I want to get close to my partner, but I keep pulling back. _____
12. I often want to merge completely with romantic partners, and this sometimes scares them away. _____
13. I am nervous when partners get too close to me. _____
14. I worry about being alone. _____
15. I feel comfortable sharing my private thoughts and feelings with my partner. _____
16. My desire to be very close sometimes scares people away. _____
17. I try to avoid getting too close to my partner. _____
18. I need a lot of reassurance that I am loved by my partner. _____
19. I find it relatively easy to get close to my partner. _____
20. Sometimes I feel that I force my partners to show more feeling, more commitment. _____
21. I find it difficult to allow myself to depend on romantic partners. _____
22. I do not often worry about being abandoned. _____
23. I prefer not to be too close to romantic partners. _____
24. If I can't get my partner to show interest in me, I get upset or angry. _____
25. I tell my partner just about everything. _____
26. I find that my partner(s) don't want to get as close as I would like. _____
27. I usually discuss my problems and concerns with my partner. _____
28. When I'm not involved in a relationship, I feel somewhat anxious and insecure. _____
29. I feel comfortable depending on romantic partners. _____
30. I get frustrated when my partner is not around as much as I would like. _____
31. I don't mind asking romantic partners for comfort, advice, or help. _____
32. I get frustrated if romantic partners are not available when I need them. _____
33. It helps to turn to my romantic partner in times of need. _____

34. When romantic partners disapprove of me, I feel really bad about myself. _____
35. I turn to my partner for many things, including comfort and reassurance. _____
36. I resent it when my partner spends time away from me. _____

Appendix F: We-ness Questionnaire

This questionnaire is designed to measure your sense of *we-ness* within your romantic relationship (i.e., your **perception of being a “WE”** rather than just “I or me” or “him/her”). In every relationship there are three connected parts:(1) the self “I/me”, (2) the partner “him/her” and (3) the relationship “we/us”. Each person and couple has their own way of creating their ideal level of we-ness. Keeping this idea in mind, please rate the statements below considering how much they contribute to your sense of being a “WE” with your current partner.

Please be honest in your responses, and keep in mind there are no right or wrong answers.

1	2	3	4	5
Not at all	Very little	A Little	Somewhat	To a great extent

1. When we tell each other something meaningful (i.e., information, thoughts and/or feelings), there is mutual acceptance and caring._____
2. We feel and show a genuine interest and supportiveness to each other’s views, feelings, wishes and plans._____
3. Having enough time for us, as a couple, is very important for both of us._____
4. We are able to help each other work through our emotions (e.g., “When I am upset, my partner tries to be there for me, and I do the same for my partner when he is upset”)._____
5. When we are together, my partner cares about my emotions (e.g., it is easy to get my partner’s attention)._____
6. Despite being busy with our own things (e.g., work, friends), we still try to share time together._____
7. We share similar meanings about the future of our relationship._____
8. If we have (had) to be separated for a long time from each other, we (would) miss each other deeply._____
9. Sometimes just by looking at each other (e.g., face and body expressions), we can feel what is going on with the other, and that makes us feel in synch._____
10. We share similar meanings about life._____
11. Our relationship equally benefits each of us personally._____
12. We tolerate and support each other’s unique characteristics. _____
13. Overall, we feel we complete each other._____

Appendix G: Relationship Strength Measure

Please rate the following statements on a scale of 1 (representing = not at all) to 10 (representing extremely).

- 1) My relationship with my partner has helped and benefitted me in my adjustment to living in Canada. _____
- 2) My relationship with my partner has made my adjustment to living in Canada easier than if I wasn't in the relationship. _____

Appendix H: Revised Relationship Assessment Scale

Please give a rating, on a scale of 1 to 5, to each statement.

1 = strongly disagree

2 = moderately disagree

3 = neither agree nor disagree

4 = moderately agree

5 = strongly agree

1. My partner and I understand each other perfectly. _____
2. I am very happy with how we handle role responsibilities in our relationship. _____
3. My partner understands and sympathizes with me. _____
4. I am not happy about our communication and feel that my partner does not understand me. _____
5. Our relationship is a success. _____
6. I am very happy about the way we make decisions and resolve conflicts. _____
7. I am unhappy about the way we make financial decisions. _____
8. I have some needs that are not being met by our relationship. _____
9. I am very happy with how we manage our leisure activities and the time we spend together. _____
10. I don't regret my relationship with my partner. _____
11. I am dissatisfied about our relationship with my parents, in-laws, and/or friends. _____

Appendix I: Brief Symptoms Inventory

Please obtain this measure from the Pearson's Clinical Assessment group website.

Appendix J: Immigration Stress Measure

Please rate how much you agree or disagree with the following statements using the following scale:

- 6 = Agree strongly
- 5 = Agree
- 4 = Tend to agree
- 3 = Tend to disagree
- 2 = Disagree
- 1 = Disagree strongly

- 1- Immigrating to Canada has brought up challenges for me that are new. Sometimes I don't know who to turn to for help and support because my Iranian friends and family also don't have enough knowledge and experience with these issues. _____
- 2- I feel like I don't belong anywhere (I don't feel fully Canadian but I also have grown apart and feel distant from my Iranian roots). _____
- 3- Sometimes I feel embarrassed when I speak English because I have an accent. _____
- 4- Sometime I feel embarrassed when I speak English because I can't find the proper words to express myself. _____
- 5- Sometimes I feel embarrassed when communicating in English because I don't understand some of the words of the other person. _____
- 6- Sometimes I feel my Iranian background is judged negatively by others and I have to work harder to prove myself to others. _____
- 7- Sometimes I feel discriminated against in Canada because of my Iranian background. _____
- 8- Sometimes I don't want others to know about my Iranian background as I feel it will stop me from getting the opportunities that I want (such as a job promotion, educational advancement, etc.). _____
- 9- Sometimes I regret my decision to immigrate to Canada. _____
- 10- Sometimes I feel sad because I have not been able to form the same type of connections with people in Canada as I had with my friends/family in Iran. _____

Appendix K: Majority-Minority Relations Survey

This questionnaire attempts to understand some experiences of Iranian immigrant minority people in Canada.

Please note: the term "majority people/group" in this questionnaire means the "White Anglo People" in Canada.

Instructions: Give a rating to each of the following statements according to how much you agree or disagree with it. There is no right or wrong answer. The best answer is your personal opinion. Please express what you actually believe to be true rather than what you wish were true. If you do not have a definite opinion about a statement, choose a degree of agreement or disagreement (from 6 agree strongly to 1 disagree strongly) that comes closest to what you think.

Please give a rating to each statement. The numbers 6, 5, 4, 3, 2, and 1 stand for the following:

- 6 = Agree strongly
- 5 = Agree
- 4 = Tend to agree
- 3 = Tend to disagree
- 2 = Disagree
- 1 = Disagree strongly

1. The majority people try to fit me into the stereotypes (cliché ideas) that they have about my ethnic group. _____
2. I find that when I am with people from the majority group, they almost always talk to each other and ignore me. _____
3. No matter how adjusted I may be to the ways (lifestyle) of the majority people, I will be seen as an outsider by this group. _____
4. My ethnic physical characteristics do not match the standards that the majority group has about good looks. _____
5. I believe people from the majority group are only interested in me on the surface level. _____
6. I believe I will never fully understand how to function successfully in the Canadian bureaucracy or "system" (educational, governmental, professional, or business operations). _____
7. I feel I am not fully accepted in organizations (e.g., private social clubs, professional associations) which have mostly members from the majority group. _____
8. The majority people believe that my ethnic accent, or nonfluent English, or lack of knowledge of Canadian expressions is a sign of ignorance (not having enough intelligence, information or education). _____

Appendix L: Hassles Scale

Following is a list of experiences which many people have at some time or other. Please indicate for each experience how much it has been a part of your life over the past few months.

Intensity of Experience over Past Few Months:

- 1 = Not at all part of my life
- 2 = Only slightly part of my life
- 3 = More than slightly part of my life
- 4 = Very much part of my life

1. My ideals and values being rejected by my family member(s) because they are seen as too "Western"._____
2. Not feeling "close" to my Iranian friends._____
3. Iranian friends see my values and thinking as too Western._____
4. I have conflict with my family because they do not want to participate in Canadian cultural events._____
5. Feeling isolated in my Iranian community._____
6. Conflict from my preference to speaking with my family in English, but they prefer Persian._____
7. Feeling that Anglo-Canadian people react on a superficial friendship basis._____
8. Being pressured by other Iranians to participate in Iranian cultural or religious events. _____
9. Overburdened with traditional family duties and obligations._____

Appendix N: Some of the Main Themes from the Comments Measure

The Comments Measure included in this study invited the participants to respond to five questions with regards to their immigration experience. The responses of participants who chose to complete this measure were reviewed and some of the main themes for each item are described below. It should be noted that this section is not a formal data analysis. Rather, the aim of this section is merely to provide the reader with a basic description of some of the main topics raised by the participants in response to the Comments Measure.

Item 1: “What has been the biggest challenge for you in terms of your experience as an immigrant in Canada? Please explain.”

Many of the participants pointed to professional and financial challenges as their biggest challenge. For example, one participant indicated the biggest challenge was “landing a job since [*sic*] the lack of Canadian experience” and another commented, “finding an appropriate job which is match to your education.” Language barriers were also identified by many participants as a source of challenge. For example, one participant expressed the initial years were “tough fitting in the social fabric without good language [*sic*] skills.” Many participants also pointed to difficulties when faced with a new culture and attempting to fit in. For example, participants expressed their challenges as immigrants included “adjusting to the culture,” “being accepted by majority,” “getting involved with Canadian community,” “finding deep/close friendships with non-Iranians,” and “relating to activities or experiences that others have experienced.” Some participants also pointed to the challenges when exposed to two cultures (the original and the new). For example, one participant expressed, “facing a new culture with way different values compared to what I have been raised to, made me re-think my old beliefs. Staying in doubt for a long time is challenging and quite scary.”

Item 2: “What would you say has been the best part of immigration for you? please explain.”

Many of the participants identified freedom and quality of life as the best aspects of immigration for them. For example, participants indicated, “freedom of speech, & thought & actions,” “unlimited opportunities to be yourself and live the way you wish,” “living in peace and quiet,” “safe society,” and “more opportunities” as highlights of immigration for them. Another participant commented the best part of immigration is that “you are living in a country that is not in trouble with other countries. You do not hear bad news every day.” Additionally, some participants expressed the best part of immigration was being able to provide their children with more opportunities. For example, one participant expressed a “better future for children” was the best part of immigration, while another highlighted “giving my children the life and freedom every human being deserve [*sic*] to have” as the best part of the process. Despite facing professional and cultural challenges associated with immigration (as described earlier in item 1), some participants also highlighted positive experiences within these same domains and viewed it as the best part of immigration for them. For example, one participant indicated, “the best part of the immigration has been the different cultures, from different part of the world and being able to meet new people and make new friends.” Another participant expressed, “the opportunities Canada has provided me are priceless. I have been able to complete my education, establish my career and build a successful and happy family in Canada due to the opportunities available to me and all other citizens.”

Item 3: “Do you have any regrets about immigrating to Canada and if you could go back in time would you make the same decision again? please explain.”

In this study, there was a challenge with interpreting the responses to item 3 mainly due to the way it was phrased (two different inquiries were combined into one item). Specifically, item 3 asks the respondents whether they have any regrets about immigrating to Canada as well as whether they would make the same decision again. It was challenging to interpret the responses of participants who did not elaborate on their answer (for example, provided a one-word yes or no response) and did not clarify which part of the item they were responding to. Additionally, some participants did not answer the item directly with responses such as “I wish i [sic] had come here at a younger age” or “as a child I missed my grandparents/and family.”

Most of the responses which were interpretable, however, were in favor of immigration. These responses included “no regrets whatsoever. I would have strongly made the same decision,” “no regrets. Best decision I have made in my life is immigrating to Canada,” and “no regret. I would immigrate to Canada again and again and again.” Amongst the interpretable responses, only one participant indicated having regrets and that “if I could go back I would not make same decision again.” A few other participants also indicated mixed feelings such as “yes, I have regrets because it is difficult to be away from your roots and your family, however, if I go back in time, I would make the same decision.”

Item 4: “Is there something that you miss a lot about your life in Iran that you haven’t been able to replace while living in Canada? please explain.”

Many of the participants responded by indicating that they miss their family and friends. Example responses from the participants included “family ties,” “parents, aunts and cousins,” “extended family,” and “my good friends.” Some participants also expressed a sense of nostalgia about the past. For example, one participant expressed missing Iran’s “streets, bookshops, restaurants, I don’t have any history here.” Another expressed missing “my childhood, when I

was a kid without any responsibility and concern.” Other example responses from the participants included missing the “mountains and 4 season in Iran,” “amazing food,” “Persian poetry,” and “my home and my land.” On the other hand, some other participants did not feel they missed anything at all. One participant responded by expressing, “I have not missed anything. in fact I replace my old life habit with better long lasting life style.” Another participant responded by stating, “no here we have everything that we had in iran.” Other example responses included simply expressing, “none,” “not really,” “not at all,” and “fortunately, No.” Some participants also referred to missing aspects of their professional lives such as their position and income. For example, one participant indicated, “I had a good job and I earned a lot but here I don't have a good job.” Another participant expressed, “I lost my reputation and standard of living.” Other participant responses included missing “my job position and line of work,” and “my income.”

Item 5: “What advice would you give a family member or close friend in Iran, who was thinking about immigrating to Canada?”

Many participants highlighted important matters to consider when thinking about immigration. For example, some of the participants pointed to the hardships of immigration, especially in the beginning, while also highlighting that it is a worthwhile process. One participant commented, “I would tell them if they can tolerate hardship at beginning (about 2 to 3 years) then do not hesitate and come to heaven.” Another expressed, "immigration is only one step easier than death . . . make sure you know what you are getting into, at the end it's worth it." Openness and learning about one's new environment were also emphasized. One participant's advice about immigration to Canada was “to study the culture, the history and especially the language of the country.” Another participant's advice was to “be open minded and ready to

change your lifestyle.” Additionally, there was a focus on being realistic about immigration and fully understanding the personal sacrifices involved in the process. For example, one participant expressed, "be ready to sacrifice everything and start from square one" while another commented, "immigrate here with open eyes and prepare yourself to start again from zero." Other participants pointed to the need to prepare for the challenges ahead such as “missing friends and family,” “finding the right profession and covering financial needs,” and having to “improve English.” There was also some emphasis on age with a tendency for participants to encourage immigration “sooner” and at a “young age.”