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THE PRIVATE AND PUBLIC LIFE DOMAINS OF ARAB YOUTH IN CANADA:  
ACCULTURATION, ETHNIC IDENTITY, SOCIAL SUPPORT, AND ADJUSTMENT

By Ashley D. Paterson

B.Sc. (Hons), McGill University, 2003

A Thesis  
submitted to the Faculty of Graduate Studies  
through the Department of Psychology  
in Partial Fulfillment of the Requirements for the  
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## ABSTRACT

Participants were recruited primarily from online and student groups resulting in a total of 99 participants (74 females, 25 males; age range: 15-21). Having a positive Arab orientation predicted family satisfaction and having a positive European-Canadian orientation predicted school and living environment satisfaction, as well as fewer invalid school absences. These results corroborate previous research findings differentiating between psychological and sociocultural adjustment, but also show that having a positive Arab acculturation orientation predicts psychological adaptation in private domains and having a positive European-Canadian acculturation orientation predicts psychological adaptation in public domains. Perceived social support received from family mediated the relation between Arab acculturation orientation and private life satisfaction, indicating that family support plays a crucial role in interpreting the relation between acculturation and adjustment. Gender comparisons revealed that males, as compared to females, reported stronger ethnic identities.

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## CHAPTER 1

### INTRODUCTION

Many researchers argue that adolescents are in a phase where they seek autonomy and independence from their parents, and their peers become increasingly important sources of social support as they are establishing their personal identity (e.g., Berry, Phinney, Sam, & Vedder, 2006; Laursen & Collins, 1994). This process of developing an identity involves both exploration and making commitments (Erikson, 1968). During this process, a normative crisis may occur that is characterized by a state of confusion with reference to the self and to the choices that the self can make (Erikson). Youth of Arab descent may find this process particularly difficult because of their minority status within Canada. In addition to their general identity development, they must actualise an ethnic identity that is conducive to their overall well-being and their feelings of belonging within Canada (Phinney, 2003). Ethnic identity is a construct that captures an individual's feelings of ethnic belonging and pride and is part of the acculturation process (Berry et al.; Phinney).

Acculturation results from the continuous contact between host and heritage cultures (Berry, Kim, Power, Young, & Bujaki, 1989; Redfield, Linton, & Herskovits, 1936). For youth of Arab descent residing in Canada, host culture refers to Canadian cultural values and norms, and heritage culture refers to Arab values and norms. According to the bi-dimensional acculturation model (Berry, Kim, Minde, & Mok, 1987), immigrants have varying degrees of affiliation with their heritage culture and with their host culture and these varying affiliations and feelings of group membership relate to their adjustment (e.g., Ward, 2001). Psychological adjustment refers to feelings of mental

well-being and satisfaction; sociocultural adjustment refers to one's ability to perform in social settings (Ward). The relation between acculturation and adjustment may differ depending on social settings. For example, parents typically encourage their children to maintain their ethnic values and associate with other members of their ethnic group (Berry et al., 2006), and therefore this acculturation orientation among family members may lead to more positive adjustment. Peers however, tend to support the exploration of the dominant culture (Oppedal, Roysamb, & Sam, 2004), and therefore this orientation may lead to more positive adjustment among peers. Nonetheless, both parents and friends are important sources of social support for youth.

Social support is a well-established buffer against the development of depression (e.g., Kuster, & Badr, 2006; Lawrence, Fauerbach, & Thombs, 2006; Takizawa et al., 2006). Immigrant youth who arrive in Canada can seek support from within their family and from their friends but given the importance of family within the Arab culture (Abu-Laban, 1980; Abu-Laban, 1999; Abu-Laban & Abu-Laban, 1999a, 1999b; Amer, 2002) and the importance of friends among adolescents (Abu-Laban & Abu-Laban, 1999b), these sources of social support may differentially influence the relation between acculturation and adjustment.

Although individuals of Arab descent have received more attention since the Gulf War in the early 1990's (Abu-Laban & Abu-Laban, 1999b), there are still few studies that explore how family and friends differentially influence a youth's acculturation process. Accordingly, the purpose of the present research project is two-fold: first, to examine how acculturation orientations differentially relate to psychological and sociocultural adjustment; second, to examine how family and friend support differentially moderate



and mediate the relation between acculturation and adjustment among Arab youth in Canada.

### *Arab Families in Canada*

The Arab ethnic group cannot be defined on the basis of physical or racial characteristics, or religious faith. Although the term Arab is often thought to refer to individuals who speak Arabic and/or who have ties to the Islamic religion (Abudabbeh, 1996, 1997), it should be noted that not all Arabs are Muslim and not all Muslims are Arab. Therefore, when referring to Arab people, one should be referring to individuals whose ancestry is rooted in one of the countries of the Arab League (Abu-Laban, 1999). There are 22 countries in the League of Arab States. They exist in the Fertile Crescent (Syria, Lebanon, Jordan, Palestine, and Iraq), in the Gulf and Arabian Peninsula (Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Saudi Arabia, and Republic of Yemen), in Northern Africa (Mauritania, Egypt, Libya, Tunisia, Algeria, and Morocco), and in other parts of Africa (Sudan, Somalia, Djibouti, and Comoros) (Abu-Laban, 1999). The term Arab-Canadian will therefore refer to individuals living in Canada who originated from one of the Arab states and whose roots are in the Arab language and culture (Abu-Laban, 1980). This definition does not discriminate between Christian and Muslim Arabs nor is it restricted to first generation immigrants. It also acknowledges that later generation Arab-Canadians may not be fluent in Arabic and may have varying degrees of identification with the Arab culture (Abu-Laban, 1980).

Within the Arab Canadian population, many subcultures exist. For example, individuals who have ties to the Gulf States, the Fertile Crescent, or North Africa differ from one another (Hakim-Larson & Nassar-McMillan, 2007). However, there are similar

customs and values pervasive throughout the Arab states that define the Arab identity (Abu-Laban, 1980; Abu-Laban, 1999). In particular, the Arab language is a symbolic and functional element central to Arab culture unity (Abu-Laban, 1999). Similar cultural traditions, myths, folklore, music, foods, and customs are also pervasive throughout the region, and these similarities considerably outweigh the differences between subcultures (Abu-Laban, 1999).

Family relationships and mutual obligations are fundamental in the Arab world and are crucial in the development of Arab ethnic identity (Abi-Hashem, 2006; Amer, 2002). Families are often the main source of honour and shame for youth as families place a lot of emphasis on social appropriateness through language, behaviour, and appearance (Abi-Hashem; Amer). Families are patriarchal; men have the most power and authority (Amer). Parents, the elderly, and paternal uncles are highly respected and are seldom challenged in disagreements (Amer). Dating during adolescence is a source of shame and youth are expected to remain living at home with their parents until marriage (Amer). The family is also closely involved in mate selection in traditional families (Abu-Laban, 1980). These values are very different from Canadian norms and values where individualism and independence are emphasized (Abu-Laban & Abu-Laban, 1999b). These Western ideals are sometimes viewed as selfish and irresponsible in collectivistic families, as Al-Issa (2000) found in his Muslim sample.

Post-World War II, particularly after 1967, Canada's immigration policy was liberalized, resulting in a large influx of Arab refugees, among others (Abu-Laban & Abu-Laban, 1999b). Recently, the number of Arabs immigrating to North America has increased because of the political unrest and lack of economic opportunities in the Middle

East (Ajrouch, 2000). According to the 2001 Census, over 300,000 individuals of Arab and West Asian descent now reside in Canada and over one third of these individuals are under the age of 24 (Statistics Canada, 2001a, 2001b). Also, most families who migrate to North America are seeking better financial and educational opportunities and wish to establish permanent residency (Al-Issa, 2000). It is therefore crucial to understand the processes that help Arab immigrant adolescents deal with differing value systems in order to aid them in developing greater life satisfaction and well-being in Canada.

### *Acculturation and Ethnic Identity*

Ethnic identity, as defined by Phinney (1990), is a construct that includes “a commitment and sense of belonging to one’s ethnic group, positive evaluation of the group, interest in and knowledge about the group, and involvement in activities and traditions of the group” (Phinney, 1996, p. 145). It has been conceptualized as a protective factor in the prevention of depression and in the promotion of psychological well-being within the acculturation process (e.g., Berry et al., 2006). The understanding of the self and ethnic background can change over time as individuals become aware of the differences among ethnic groups and the meaning of their ethnicity in relation to the dominant culture (Phinney, 2003). In fact, one’s ethnicity may become increasingly salient during adolescence (Waters, 1990) and therefore becomes an important component in defining one’s sense of self.

Acculturation results when two cultures come into continuous contact forcing change in either or both of the cultures (Berry et al., 1989). On an individual level, it is the contact between the individual’s heritage culture and the host culture that causes change within the individual (Berry et al.). All immigrants become acculturated upon

arrival in a new country and as they begin experiencing the host culture, their ethnic identity may be altered (Berry et al.). Berry's bi-dimensional acculturation model addresses two issues. First, to what extent are individuals willing to maintain their cultural identities and customs, also termed their heritage cultures? Second, to what extent are individuals willing to develop inter-ethnic relationships and positive attitudes towards the larger host culture's values and norms? Berry described four acculturation orientations based on an individual's orientation towards cultural maintenance and inter-group contact. Immigrants are labelled as practicing a separated acculturation orientation when they wish to maintain their cultural heritage and participate in activities related to their ethnic group while refusing to participate in activities of the larger society (Berry et al.). An assimilated acculturation orientation develops when an immigrant relinquishes his or her heritage cultural identity and accepts the cultural attitudes, norms, and values of the larger society (Berry et al.). A unidimensional acculturation model would include only these two acculturation orientations. It would have a single axis with maintenance of heritage culture and acceptance of dominant (or host) culture on either pole. In this model, assimilation and acculturation are terms that are used interchangeably (Trimble, 2003). The bi-dimensional model, however, acknowledges the fact that an individual can either simultaneously accept or reject both cultures (Berry et al.). An integrated acculturation orientation involves the acceptance of both cultures and a marginalized acculturation orientation involves the rejection of both cultures (Berry et al.). This bi-dimensional model has been tested with many populations, Arabs included (Abu-Rayya, 2006). In a study examining acculturation and well-being among Arab-European adolescents in Israel, the degree of Arab identification and the degree of European

identification was found to be uncorrelated, thus supporting the bi-dimensional model (Abu-Rayya). To date, Canada has held a policy of multiculturalism that encourages immigrant families to maintain their ethnic values and traditions but also encourages immigrant families to learn English or French and integrate into the dominant culture (Berry et al., 2006).

Within the literature, the constructs of ethnic identity and acculturation overlap a great deal, partly as a result of a lack of distinction within the definitions (Phinney, 2003). Although ethnic identity is conceptualized as a self-identification construct, self-identification is also an aspect measured by many of the acculturation scales (e.g., the Sunn-Lew Asian Self-Identity Acculturation Scale, the Acculturation Rating Scale for Mexican Americans-Revised) (Phinney). Language use and behavioural preferences also appear on ethnic identity measures as well as acculturation measures (Phinney). For the purpose of the present research, these two constructs were measured using separate questionnaires that addressed specific aspects of acculturation and ethnic identity. Ethnic identity was conceptualized as the aspect of acculturation that captures the subjective feelings about one's ethnicity (Phinney), whereas acculturation was conceptualized as a more global construct that includes aspects of ethnic identity as well as changes in behaviours, activities, and values (Ward & Raa-Deuba, 1999).

### *Adjustment*

#### *Adjustment for Arab Youth*

Research examining the psychological adjustment of immigrants of Arab descent in the West is only beginning to appear in the literature (e.g., Barry, Elliott, & Evans, 2000; Faragallah, Walter, Schumm, & Webb, 1997; Hakim-Larson & Nassar-McMillan,

2007), and few scholars have as of yet explored the factors influencing an adolescent's acculturation process and identity formation (Abu-Laban & Abu-Laban, 1999a, 1999b; Berry et al., 2006; Hakim-Larson & Nassar-McMillan). The acculturation and identity formation processes for youth of Arab descent may be particularly difficult compared to other immigrants. First, like their parents, they may be considered a double minority because they may be a visible minority and they may also be a religious minority in North America if they practice Islam. This status may fuel a greater degree of prejudice from the majority culture. In fact, it has been suggested that Arabs in the United States are one of the few groups who are openly stereotyped and subjected to prejudice (Faragallah et al.; Lamb, 1987; Suleiman, 1989 as cited in Barry et al.). Especially since the tragic attacks of September 11, 2001, perceived discrimination against Arab Americans has been high (Hakim-Larson & Nassar-McMillan). Even in Canada where multiculturalism is encouraged, Arabs and Muslims were among the ethnic groups who displayed the greatest degree of discomfort around individuals of an ethnic group other than their own, compared to other ethnic minority groups (Berry & Kalin, 1995). The extent to which youth feel that they are victims of prejudice and discrimination may influence the degree to which they feel that their identity has been compromised (Abu-Laban & Abu-Laban, 1999b) and may in turn relate to their adjustment in Canada. This in turn may relate to the degree to which they are capable of integrating into Canadian society or maintaining their Arab culture and beliefs. In fact, it has been argued that some Arabs deny their ethnicity or willingly mislead others about their ethnicity to avoid possible discrimination or prejudicial attitudes by others (Hakim-Larson & Nassar-McMillan).

Second, Arab youth have been described as being “in-between” two worlds (Abu-Laban & Abu-Laban, 1999b). According to Abu-Laban and Abu-Laban, their private world includes their families and their public world includes their friends and individuals in the community. On the one hand, parents often exert a considerable amount of pressure on their children to maintain their ethnic pride and beliefs (Berry et al. 2006), and on the other, the youth seek acceptance from their peers who do not always hold the same value system (Oppedal et al., 2004). According to Abu-Laban and Abu-Laban’s survey, 86% of Arab-Canadian youth respondents thought that their parents felt “very strongly” about their Arab background and 14% perceived their parents to feel “somewhat strongly” about their Arab culture, suggesting that parents continue to express pride in their heritage culture while living in Canada. Furthermore, the youth in this survey reported that their parents encouraged them to preserve their Arab culture (Abu-Laban & Abu-Laban). Ajrouch (2000) argues that ethnic identity can be equated to identification with one’s family. According to her, it is the family that encourages the continuation of traditions and it is through the family that people find a sense of belonging and ethnic pride.

Peers, on the other hand, tend to support the exploration of the dominant cultural norms and values (Oppedal et al., 2004). The extent to which youth choose to conform to the expectations of their peers may promote positive adjustment among friends and at school, but may compromise family relationships (Faraghallah et al., 1997; Oppedal et al.). It has been suggested that many Arab parents may become concerned about certain practices among Canadian youth such as immodest dress codes, alcohol use, and sexual experimentation (Abu-Laban & Abu-Laban, 1999a; Al-Issa, 2000). This difficult position

between the two cultures may relate to youth's acculturation orientations and to their adjustment in the various domains of life.

The media also influences youth's acculturation process, as it is a central factor in spreading norms and values (Barnett & MacPhail, 1980). Information we receive from the media can influence how we view our culture and ourselves (Clement, Baker, Josephson, & Noels, 2005). Westernized television programs expose Arab youth to the dominant North American culture and help them integrate Western norms and values into their Arab culture (Shuraydi, 2006). However, North American media has a history of being biased against Arabs (Abu-Laban et al., 1999b), which may affect Arab youths perception of themselves. Arab satellite television channels such as Al-Jazeera, on the other hand, aid in the preservation of the Arab culture in Canada (Shuraydi). In fact, these channels appear to increase youths interest in their parents' home country (Hagreaives & Mahdjoub, 1997 as cited in Shuraydi). Shuraydi argues that these satellite television programs do not isolate Arab youth within the Arab world, but aid them in integrating their Arab heritage into the host culture. Therefore, the degree to which youth immerse themselves in North American or Arab media can influence the degree to which they are capable of integrating both cultures into their current living situation and how they feel about their Arab identity.

#### *Acculturation and Adjustment*

Acculturation has been conceptualized as a potential risk factor for mental health problems (Berry, 1990; Ward, 2001). Thus, the term acculturative stress has often been used to emphasize this mental health risk in diathesis-stress models of depression (Berry; Ward). In particular, a marginalized acculturation orientation is characterized by the



greatest amount of acculturative stress, confusion, and anxiety (Berry et al., 1989), and has been associated with feelings of alienation and loss of cultural identity (Berry & Annis, 1974; Berry et al., 1987). For these reasons, it has been identified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) as an Axis IV psychosocial and environmental stressor (American Psychiatric Association, 2004).

There are multiple ways one can measure adaptation as a result of acculturation. Ward (2001) has identified two prominent areas of adaptation: psychological adaptation and sociocultural adaptation. According to Ward, psychological adaptation refers to feelings of mental well-being and satisfaction. It is the affective component of adaptation and includes such variables as self-esteem, life satisfaction, and mental health (Ward). Sociocultural adaptation refers to the abilities required to perform well in new social settings (Ward). These abilities include such variables as language proficiency, school adjustment, and knowledge of the host culture and can be conceptualized as the behavioural component of adaptation (Ward). Host culture identification is strongly linked to sociocultural adaptation (Ward & Kennedy, 1994) whereas heritage culture identification is strongly linked to psychological adaptation (Berry et al., 2006). According to Berry and colleagues, psychological adaptation of immigrant youth is dependent on their sociocultural adaptation. For example, immigrants' ability to converse in the dominant language may affect their well-being within the host country. Furthermore, one's psychological adaptation depends on the availability of social support (Berry et al.).

Different acculturation orientations have been associated with different levels of acculturative stress and well-being (e.g., Berry et al., 2006). Marginalization and

separation have been associated with high levels of acculturative stress, integration with low levels of stress and high levels of well-being, and assimilation has been linked to intermediate stress levels (Berry et al., 1987; Berry et al., 2006; Segall, Dasen, Berry, Poortinga, 1999). One's ethnic identity, as part of the acculturation process, also affects adaptation. According to Phinney (1996), identifying with two ethnicities is similar to having an integrative orientation. She argues that the maintenance of one's ethnic identity coupled with a positive mainstream orientation leads to higher self-esteem. Werkuyten and Nekuee (1999) however, view dual-ethnicity as a vulnerability factor to depression. They argue that establishing dual-ethnicity may be particularly stressful as it may lead to cultural conflict. This is particularly relevant among adolescents whose desire to maintain their ethnic identity at home is strong, but in school and amongst friends groups, more importance is placed in upholding the host country's values and norms (Abu-Laban & Abu-Laban, 1999b). Even though Canada has held a policy of multiculturalism and youth are often able to associate with other Arab youth when at school, this pressure to maintain some Canadian norms can cause personal conflict (Abu-Laban & Abu-Laban).

The marginalization orientation has been associated with high levels of stress and low levels of life satisfaction (Oppedal et al., 2004). Oppedal and colleagues suggest that marginalization in children and adolescents can be conceptualized as a phase of indecision and uncertainty resulting in an ethnic identity crisis. This crisis is associated with difficulties in goal setting and committing to values. Although this phase may lead to increased stress, and decreased satisfaction with life, it is a crucial aspect of ethnic identity formation (Oppedal et al.).

*The International Comparative Study of Ethnocultural Youth.* The “International Comparative Study of Ethnocultural Youth” (ICSEY; Berry et al., 2006) examined ethnic identity, acculturation, and adjustment among 7,997 adolescents between the ages of 13 and 18. A total of 3,165 parents also completed the study. Thirteen host countries and 26 immigrant groups were sampled. The host countries included Australia, Canada, Finland, France, Germany, Israel, The Netherlands, New Zealand, Norway, Portugal, Sweden, United Kingdom, and the United States. The goal of this project was to better understand how immigrant youth adapt and persevere when faced with two intersecting cultures. Their results indicated four patterns in the way immigrant youth acculturate. The most frequently endorsed profile consisted of adolescents who had an integrated approach (integration profile). These youth spoke both their dominant and ethnic languages, socialized with peers of the same ethnic groups as well as peers from other ethnic groups, and identified with both their ethnic as well as the national identities.

The second profile consisted of adolescents who displayed a clear orientation towards their heritage ethnic group (ethnic profile). They had strong heritage ethnic identities, elevated ethnic language proficiency and usage, and high ethnic peer contact.

The third profile consisted of adolescents who displayed a strong preference for the mainstream society in which they resided (national profile). They were high on national identity, low on ethnic identity, espoused an assimilation orientation, socialized with peers of the national majority, and showed a preference for the national language.

The fourth profile was labelled the diffuse profile and it was not easily interpretable. It included adolescents who did not identify with either their ethnic or national identity but were proficient in their ethnic language and often used this language,

and were not proficient in the national language and did not use that language. The adolescents with a diffuse profile endorsed three contradictory acculturation orientations: assimilated, separated, and marginalized.

Results of the ICSEY study (Berry et al., 2006) indicated that a bi-cultural orientation was associated with positive sociocultural adaptation, which in turn was associated with positive psychological well-being. Psychological well-being was also higher in youth who had a strong orientation towards their own ethnic group. The ethnic profile, which consisted of youth who had a strong ethnic identity and a heritage acculturation orientation, had the strongest positive relation with both psychological and sociocultural adaptation. The national profile only showed modest positive contributions to sociocultural adaptation and was associated with poorer psychological adaptation. These results suggest that a host culture orientation relates more to sociocultural adaptation than to psychological adaptation, and psychological adaptation is related more to ethnic identity and a heritage culture orientation than to a host culture orientation.

Results from the ICSEY project (Berry et al., 2006) are similar to other research findings. Abu-Rayya (2006) examined Berry's (1987) acculturation model in Arab-European adolescents living in Israel. He found that adolescents who identified with an integrated or a European acculturation orientation had high levels of self-esteem and positive social relationships, and low levels of depression and anxiety. Contrary to the findings in the ICSEY study, assimilation into the European culture was related to positive psychological adjustment, but negative sociocultural adjustment. That is, it was related to high levels of self-esteem and low levels of depression, but high levels of anxiety and low levels of positive social relationships with others. In Abu-Rayya's study,

demonstrating a marginalization orientation was consistently related to poor mental health. Ward and Kennedy (1994) examined sojourners employed in New Zealand. Their results indicate that an assimilation orientation is associated with enhanced sociocultural adjustment but diminished psychological well-being, separation was linked to positive psychological adaptation but poorer sociocultural adaptation, and an integration orientation appeared to be the most effective adaptation strategy. These studies suggest that having an integration orientation, coupled with a strong ethnic identity, is related to the highest levels of positive adjustment (Abu-Rayya; Berry et al.; Ward & Kennedy).

#### *Acculturation and the Family*

Family members are thought to acculturate at different rates. It has been suggested that children will acculturate more quickly than their parents because they are exposed to the host culture at school on a daily basis (Okagaki & Bojczyk, 2002) creating greater opportunities, necessity, and motivation for them to participate in and learn about the dominant culture (Phinney, Ong, & Madden, 2000). It has also been shown that parents tend to have more difficulty than their children in learning the new language (Portes & Schauffer, 1994). Nguyen and Williams (1989) found that the length of residency in the United States was related to adolescents' values but not parents' values, further suggesting acculturation rate discrepancies between parents and children.

These differences may threaten family bonds (Al-Issa, 2000; Santisteban & Mitrani, 2003). For example, if a father espouses a separation orientation and his daughter appears to be assimilated into the dominant culture, his rejection of the dominant culture may be interpreted by his daughter as a personal rejection of her as a person (Santisteban & Mitrani). Also, if parents become dependent on their children

because of limited abilities with the dominant language, parents may become humiliated and this in turn may compromise the parent-child relationship (Al-Issa). In fact, Faragallah and colleagues (1997) found that among Arab immigrants, the degree of assimilation into American society was related to greater life satisfaction, but poorer family satisfaction.

It has also been argued that parent-child acculturation differences are more salient in certain domains (Costigan & Dokis, 2006). In Costigan and Dokis' study examining Chinese immigrants in Canada, it was found that parents and children were most dissimilar in their public Canadian behaviours and in their private Canadian values. They were most similar in their private Chinese identity and values and were moderately similar in their public Chinese behaviours. Given these differences in behaviour and identity between parents and children, a specific acculturation orientation may be related to different levels of satisfaction in the various life domains. That is, having a separation orientation may be related to having greater family satisfaction but poor satisfaction with friends, and having an assimilation orientation may be related to greater friend satisfaction but poor family satisfaction. Furthermore, youth may require different support networks in different social settings in order to develop greater satisfaction in the various life domains.

### *Social Support*

Shen and Takeuchi (2001) argue that examining the direct relation between acculturation and well-being is problematic without considering other confounding or contributing factors such as social support. Social support can be defined in multiple ways. Tardy (1985) suggested breaking down social support into five dimensions in order

to clarify appropriate definitions. These dimensions are: (1) direction of support (support can be given and/or received), (2) disposition (availability vs. utilization of support), (3) description versus evaluation of satisfaction with support, (4) content (instrumental vs. emotional support), and (5) network (what social system(s) provide(s) the support?). Social support for the purpose of the present study will be defined as perceived impact that friend and family networks have on an individual (Procidano & Heller, 1983). It is the perception that one's needs for support, information, and feedback are met (Procidano & Heller).

#### *Social Support for Youth of Arab Descent*

Support networks are as important among Arab immigrant families as non-immigrant families, but they appear to be slightly more complex. Family support is often unattainable to immigrants because they frequently arrive in Canada alone or with only a fraction of their family members (e.g., Faragallah et al., 1997). Many researchers have hypothesized that the stress of acculturation coupled with the lack of the support networks formerly available to them in their heritage country may make immigrant families particularly vulnerable to family problems and disorganization (Cornille & Brotherton, 1993; Parrillo, 1991; Torres-Matrullo, 1980; as cited by Faragallah et al.).

Friend support may also differ depending on whether the person in question seeks friends from within or from outside their ethnic group. Immigrants often choose to befriend individuals of their own ethnic background (Abu-Laban & Abu-Laban, 1999b; Berry et al., 2006). Individuals of one's own ethnic group are more likely to speak the same language, share the same customs, and experience the same difficulties in the host country (Abu-Laban & Abu-Laban). It has been argued that the maintenance of these in-

group friendships is important in the prevention of depression (Schweitzer, Melville, Steel, & Lacherez, 2006). For example, research examining trauma and social support in Sudanese refugees resettled in Australia (Schweitzer et al.) found that the presence of family and social support within the Sudanese community were significant determinants of mental health functioning while social support from individuals outside their ethnic group did not predict mental health.

Muslim adolescents who isolate themselves among other Muslims may be less vulnerable to the negative effects of prejudice and discrimination (Al-Issa, 1997). This may promote positive psychological adaptation. However, the youth may also risk placing themselves at a disadvantage in terms of developing the appropriate skills in order to function in Canadian society, thus hindering their sociocultural adaptation. Beiser (2006) found that in comparison to Chinese refugees, Vietnamese and Laotian refugees who were unable to settle in like-ethnic communities had a larger number of incidences of Depressive Disorder within the first two years of their resettlement. This difference however, disappeared after two years. He suggested that Vietnamese and Laotian refugees benefited from developing social networks outside of their ethnic group and from learning the English language.

#### *Social Support as a Mediator or a Moderator*

Research supports both a mediating and a moderating role of social support on the relation between acculturation and life satisfaction (e.g., Oppedal et al., 2004). In a mediation model, the independent variable (acculturation) is assumed to account for the variations in the mediator (social support), which in turn would account for variations in the dependent variable (adjustment) (Holmbeck, 1997). That is, acculturation would



directly relate to one's perception of the availability of social support, which in turn would relate to one's degree of life satisfaction.

Although family and friend support both influence mental health and adaptation in a positive direction (Castillo, Conoley, & Brossart, 2004; Edwards & Lopez, 2006; Oppedal et al., 2004; Rodriguez, Mira, Myers, Morris, & Cardoza, 2003) their roles may differ in helping Arab adolescents acculturate to Canadian schools and communities. With reference to Berry's (1987) bi-dimensional acculturation model, Oppedal and colleagues argue that parents influence the ethnic dimension while peers have greater influence on the host culture dimension. They examined the mediating role of family, peer and classmate support on the relation between acculturation and mental health. They found that host culture competence significantly related to support from class, which in turn significantly related to ill mental health. Ethnic culture competence was significantly related to family and friend support, but only family support subsequently related to ill-mental health. Therefore, Oppedal and colleagues identified class and family support as significant mediators between host and ethnic culture competence, respectively, but friend support was not identified as a significant mediator. For the current study, it was expected that family support would mediate the relation between ethnic culture orientation and life satisfaction in private domains (i.e., family), and peer support would mediate the relation between host culture orientation and life satisfaction in public domains (i.e., friends, school, and living environment). The literature review for this study did not reveal any studies examining the mediation role of social support among youth of Arab descent living in Canada.

A moderator qualifies the relation between the independent variable (acculturation) and the dependent variable (adjustment) (Holmbeck, 1997). Moderators are also termed buffers, protective factors, or interaction variables (Holmbeck). In the relation between acculturation and life satisfaction, high social support compared to low social support would more effectively buffer the high acculturation stress-poor adjustment relation. Although Rodriguez et al. (2003) did not find a moderating role of social support in their Latino sample, many researchers have argued that social support acts as a protective factor against the negative consequences of the acculturation process (e.g., Berry, 1990; Oppedal et al., 2004). Research examining the moderating role of social support often views it as a global construct. Since family and friends seem to influence different aspects of the acculturation process, it is important to examine these sources of social support separately.

Receiving support from one's family can ease the stress resulting from the acculturation process (Henry, Stiles, Biran, & Hinkle, 2008; Santisteban & Mitrani, 2003). A family's ability to protect, guide, and nurture its children may significantly influence an adolescent's success (Santisteban & Mitrani). However, if a family is inflexible and lacks appropriate communication skills, the acculturation-related stressors can result in increased family conflict and long lasting family deterioration (Henry et al., 2008; Santisteban & Mitrani). In fact, Oppedal and colleagues (2004) identified a negative correlation between family support and ethnic identity crisis suggesting that the exploration phase of identity formation is associated with increased family discord and friction. Their results also indicate that decreases in family support in combination with reduction in host culture competence were related to poor mental health. In contrast,

increases in host culture competence in combination with low levels of family support did not relate to poor mental health.

As children gain more autonomy and expand their social networks during adolescence, peers and teachers become increasingly important sources of social support (Cauce, Felner, & Primavera, 1982; Cauce, Mason, Gonzales, Hiraga, & Liu, 1994; Cauce, Reid, Landesman, & Gonzales, 1990; Felner, Ginter, & Primavera, 1982; Felner, Primavera, & Cauce, 1981; Robinson, 1995). It has been argued that friend support makes a greater contribution to well-being in Latino college students compared to family support (Rodriguez et al., 2003). For adolescents with both immigrant and host society origins, it has been found that support from classmates and from teachers protects against mental illness (Cauce et al., 1982; Felner et al., 1982; Oppedal et al., 2004). Oppedal and colleagues found that decreases in friend support in combination with a reduction in ethnic competence related to poor mental health. Results from their study suggest that family support buffers the relation between host culture competence and mental health and friend support buffers the relation between heritage culture competence and mental health. The literature review for this study did not reveal any studies examining the moderating role of social support in an Arab-Canadian population nor did it reveal any studies examining social support in relation to acculturation and life satisfaction.

### *Gender*

According to Abu-Laban and Abu-Laban (1999b), Arab culture emphasizes traditional values, hierarchical relationships, and conformity. Sex roles within the family are well defined, and males hold more authority and status than females. In contrast, in Canada, individualism, egalitarianism, and personal freedom are emphasized for both

genders. Although sex roles exist, they are not as strictly defined and adhered to as they are in Arab cultures. These cultural differences can be linked to the number and types of challenges Arab-Canadian females and males must face when developing their ethnic identities and in their relationships with family members and friends.

It has been argued that males have stronger Arab ethnic identities (Abu-Laban et al., 1999a; 1999b; Oppedal, Roysamb, & Heyerdahl, 2005) and are more comfortable disclosing their Arab identity than females (Abu-Laban et al., 1999a; 1999b). In a survey conducted by Abu-Laban and Abu-Laban (1999a), 36% of females compared to 14% of males identified more with Canadian culture than with Arab culture. Furthermore, 3 out of 10 females compared to 1 out of 10 males tried to hide their Arab identity. Oppedal and colleagues also found males to be more traditional compared to females. In their study males had higher scores on ethnic culture competence and collectivistic family values whereas females had higher host culture competence. Furthermore, the ICSEY project (Berry et al., 2006) examined gender differences in acculturation across a diverse sample of immigrant youth and found that girls were more likely than boys to endorse an integrated acculturation orientation and girls reported greater usage of the national (non-ethnic) language. In contrast, boys were more likely to exhibit a diffuse identity profile. Also, boys had slightly better psychological adaptation, as measured by life satisfaction, self-esteem, and psychological problems, and girls displayed better sociocultural adaptation, as measured by school adjustment and lack of behavioural problems.

There could be several explanations for these discrepancies. First, these differences may be a result of the different treatment sons and daughters receive from their parents (Abu-Laban, 1980, 1999; Abu-Rabia, 1997; Shakir, 1997). According to the

study conducted by Abu-Rabia, Arab mothers encouraged daughters to integrate into Canadian culture while Arab fathers discouraged such attempts. Second, these differences may be a result of the perceived or actual personal freedom males and females have (Abu-Rabia). Females may feel more pressure than males to maintain the culture, and during their teenage years, they may rebel against this (Abu-Rabia). Ajrouch (1999) argues that it is the different female behaviours present in Arab versus Western cultures that help define ethnic identity. She stated: "immigrant families hold onto their Arab ethnicity through their daughters and strive to attain the American dream through their sons" (p.138). These different roles may present different challenges for the two genders. According to a survey, 49% of sons and 70% of daughters reported more problems for females than for males (Abu-Laban & Abu-Laban, 1999b). Respondents of this survey stated: "The culture restricts [women] more"; "Men have more freedom; women are more restricted from going out"; "The man can do anything, the girl is being watched all the time. If she is with a male friend, people would talk about her" (p.124). These different restrictions lead to the perception of a double standard in the treatment of men and women and may relate to how readily an Arab adolescent identifies with the Arab culture, especially for females (Abu-Laban & Abu-Laban).

Young Arab Canadian males are more likely than females to socialize with other youth of the same ethnic or religious background (Abu-Laban & Abu-Laban, 1999b). It has been suggested that this difference is linked to the level of personal freedom and individuality that females can experience with non-Arab peers (Abu-Laban & Abu-Laban). One young woman stated: "My own people aren't quite developed yet. It's hard to deal with them. As an Arab woman I can only do so much. They can't accept the fact

that I am liberal” (Abu-Laban & Abu-Laban, p. 121). Thus, the source of friend support may differ between males and females, which in turn may relate to their attitudes towards acculturation, their ethnic identity, and their adjustment in Canada.

### *The Present Study*

#### *Internet Research with an Arab Population*

According to Barry (2001), recruiting Arab participants poses unique problems. Many of his potential participants expressed concerns that the information they provided would be used to portray Arabs in a negative manner. Since recruiting participants from traditional methods was not proving to be fruitful, he turned to the Internet. He felt that this method allowed participants to feel more at ease in responding to personal questions as they had an increased sense of anonymity. The Internet further facilitates self-exploration (Turkle, 1995), which is particularly relevant for a study examining ethnic identity, acculturation, perceived social support, and adjustment. For this project, adolescents of Arab descent residing across Canada, especially in Quebec and Ontario, were recruited. Given the ubiquitous nature of the Internet, the popular use of online groups and forums among adolescents, and the problems Barry faced when recruiting Arab participants, it was decided that this means of data collection was particularly relevant for this project.

Gosling Vazire, Srivastava, and John (2004) address six preconceptions of Web-based surveys by comparing an Internet sample ( $N = 361, 703$ ) with a set of 510 published traditional samples. Their data were collected from the outofservice.com website and their results support the use of Web-based surveys.

The first preconception is that Internet samples are not demographically diverse (Gosling et al., 2004). Results from the Web-based research project by Gosling and colleagues suggest otherwise. They found that on average, 71-77% of respondents in traditional research were female and from their sample, only 57% were female. Also, they found that in traditional research, 70-85% of samples were drawn from university populations, suggesting that the samples were taken from high-income and highly educated families. Their Internet sample displayed a more balanced social class distribution with 22% below middle class and 32% above middle class. Furthermore, traditional samples tend to include participants from only one locale, but Web-based research can access participants from many different locales, increasing the generalizability of samples (Gosling et al.). This method of data collection is also particularly relevant for adolescents. Almost 50% of their sample was comprised of youth between the ages of 11 and 20. Thus, their results suggest that although web-based research is not representative of the population at large, it is more representative than traditional samples with respect to age, gender, socio-economic status, and geographic region. Therefore, this method was particularly relevant for the current study.

The second preconception argues that Internet samples are comprised of maladjusted, socially isolated, or depressed individuals (Gosling et al., 2004). Gosling and colleagues however, compared the 21-year-olds from their Internet sample to a sample of 21-year-olds from three university subject pools. They found no significant difference in the two samples in terms of neuroticism or introversion, suggesting that Internet users are not maladjusted, socially isolated, nor are they depressed.

The third preconception argues that Internet findings cannot be generalized across presentation formats (Gosling et al., 2004). From the outofservice.com data, Gosling and colleagues compared two versions of the same personality questionnaire. Their results suggest that presentation format does not significantly relate to the quality of the data.

The fourth preconception is that Internet participants are not sufficiently motivated to take online surveys seriously and respond accurately (Gosling et al., 2004). Gosling et al. argue that paper and pencil measures are just as susceptible to inaccurate responding. They also cite research that argues that student samples are more likely than non-student samples to be suspicious of research (Argyris, 1968; Jourard, 1968; Orne, 1962 as cited in Gosling et al.) and hostile towards the experimenter (Jackson & Pollard, 1966; Jourard, 1968 as cited in Gosling et al.). This suggests that traditional samples are more susceptible to biased responding and lack of motivation. From the outofservice.com data, Gosling and colleagues compared alpha reliabilities and scale intercorrelations of the Big Five Inventory in order to address the possibility that participants were answering favourably in order to receive positive feedback. Their reliability coefficients were similar to those obtained on paper-and-pencil measures (John & Srivastava, 1999 as cited in Gosling et al.) suggesting that Web-based questionnaire data are not significantly affected by unmotivated or self-enhancing participants.

The fifth preconception addressed by Gosling et al. (2004) states that the anonymity provided by the Web-based questionnaires compromises the integrity of the data. They argue however, that since participants are completing questionnaires alone, without an experimenter, then anonymity should be increased and therefore motivation to respond honestly should be increased. Providing such anonymity however, may increase



the possibility that subjects will respond to the questionnaire multiple times (Gosling et al.; Kraut et al., 2004). To prevent this, Gosling and colleagues suggest tracking IP addresses and comparing participants with identical IP addresses on certain demographic variables (e.g., age, gender, religion).

The sixth and final preconception is that Internet findings are not consistent with findings from traditional methods (Gosling et al., 2004). There has been a handful of research supporting cross-method replicability (Benet-Martinez & John, 1998; Costa, Terracciano, & McCrae, 2001; Feingold, 1994; Goldberg, Sweeney, Merenda & Hughes, 1998; Srivastava et al. 2003 as cited by Gosling et al.) but Gosling and colleagues maintain that this question remains to be explored further.

Although web-based research offers unique opportunities for recruiting a diverse and large sample, there are some challenges that must be addressed. First, ensuring that the ethical guidelines underlying research with human subjects are followed is mandatory. These principles are: risk to human subjects may not exceed the benefits, subjects must participate voluntarily, and informed consent must be obtained prior to participation.

Informed consent, instructions, and debriefings online may be more difficult to administer than in traditional face-to-face settings (Kraut et al., 2004). Informed consent administered online has been shown to be compatible with paper forms (Varnhagen et al., 2005). Concerns have been raised with regards to participants' comprehension of the informed consent (Kraut et al.). Suggestions to increase understanding include: checking a box to accept each statement of the informed consent or having a quiz following the informed consent (Kraut et al.). However, extra efforts to ensure informed consent may

reduce response rates, increase non-response to sensitive questions (Singer, 1978 as cited in Kraut et al.), and produce biased data (Trice, 1987 as cited in Kraut et al.). Therefore, it is only recommended to make extra efforts to ensure informed consent when there is more than minimal risk to the participant (Kraut et al.).

### *Purpose of the Present Research Project*

The purpose of the present study was two-fold. One purpose was to investigate the relations between acculturation and adjustment in various domains. Since ethnic identity is a component of acculturation, it was also measured. Another purpose was to examine the mediating and moderating roles of friend and family perceived social support on the relation between acculturation and life satisfaction.

Given the conflicting worlds that Arab adolescents in Canada may encounter, it is likely that their adjustment within the various domains of their lives will differ depending on their acculturation orientation. Therefore, for the purpose of this project, five areas of psychological adjustment were examined: life satisfaction within the family, at school, with friends, with the self, and within one's living environment. School adjustment and invalid school absences, that is, number of times absent from school with a valid reason, were also measured to assess sociocultural adjustment.

Like most adolescents in Canada, Arab youth likely desire greater independence from their parents, and thus rely more heavily on their peers for support and guidance (e.g., Berry et al., 2006; Laursen et al., 1994). This change in support seeking strategies makes it necessary to examine friend and family support separately when looking at the relation between acculturation and life satisfaction. Therefore, the mediation and moderation roles of friends and family support were assessed independently.

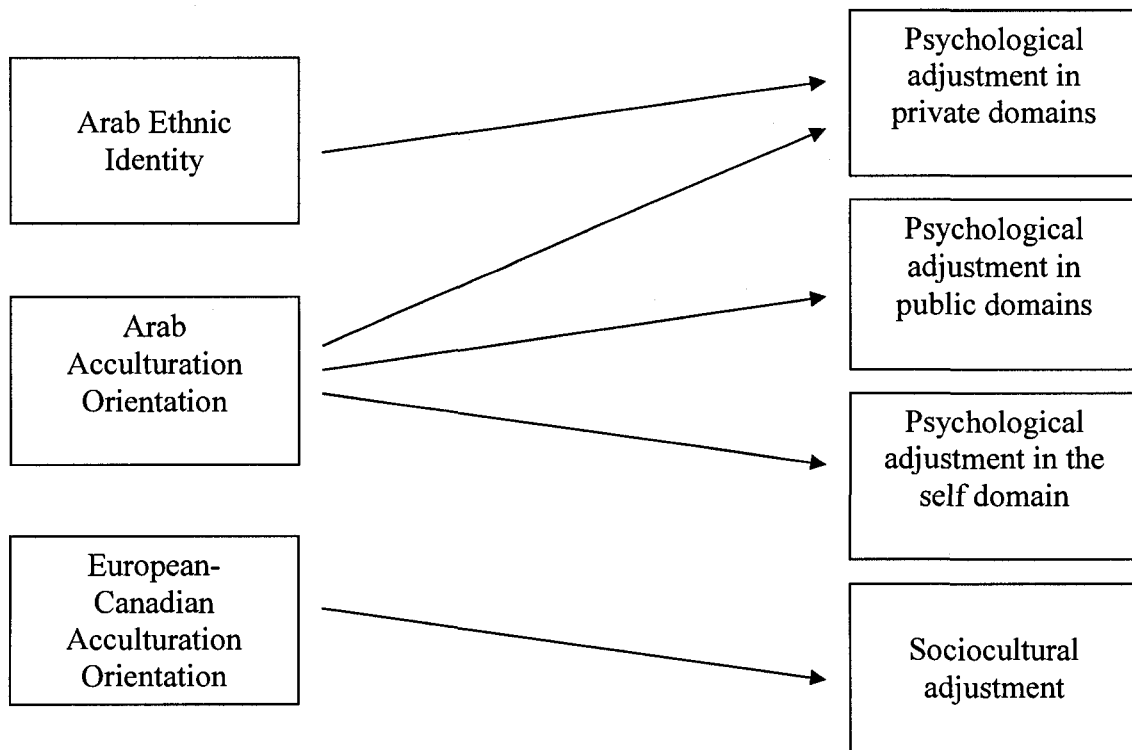
## *Research Questions and Hypotheses*

Building on previous studies on acculturation, adjustment, and social support (Abu-Laban & Abu-Laban, 1999b; Faragallah et al, 1997; Oppedal et al., 2004; Oppedal et al., 2005; Ward, 2001), the present study explored the following research questions and hypotheses:

Research Question #1: How is acculturation and ethnic identity related to psychological adjustment in various domains (family, school, friends, self, and living environment) and sociocultural adjustment?

Previous research has suggested that parents influence ethnic retention while peers support the exploration of the dominant culture (Oppedal et al., 2004). It has also been argued that parents are most similar to their children in their private ethnic identity and values and most dissimilar in their public Canadian behaviours and private Canadian values (Costigan & Dokis, 2006). Thus, different acculturation orientations may differentially relate to the various domains of life satisfaction. That is, having a separation orientation at home may be related to having greater family satisfaction and having an assimilation orientation amongst friends may be related to greater friend satisfaction. Furthermore, greater sociocultural adjustment has been related to greater host culture orientation (Ward, 2001). Based on these findings, the hypotheses below were examined for the present study. See Figure 1 for a visual description of the hypotheses.

- Hypothesis #1a: *High levels of Arabic acculturation orientation will predict high levels of life satisfaction in the family domain.*



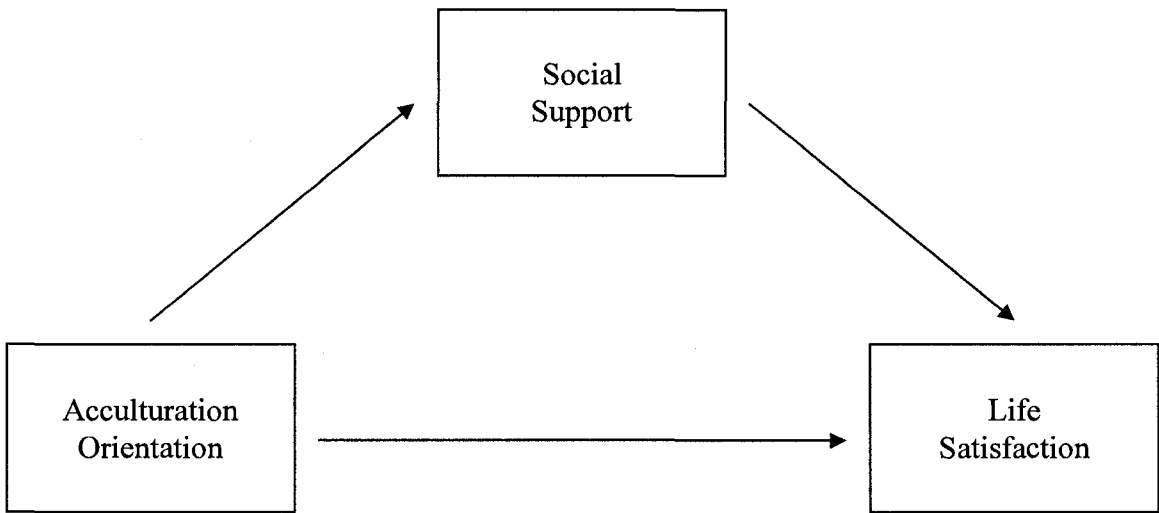
*Figure 1.* Predictors of Private and Public Psychological Adjustment, Psychological Adjustment in the Self Domain, and Sociocultural Adjustment.

- Hypothesis #1b: *High levels of European-Canadian acculturation orientation will predict high levels of life satisfaction in the school, friends, and living environment domains.*
- Hypothesis #1c: *A strong ethnic identity will predict high levels of life satisfaction in the family domain.*
- Hypothesis #1d: *High levels of both Arabic and European-Canadian acculturation orientations will predict high levels of life satisfaction in the self domain.*
- Hypothesis #1e: *High levels of European-Canadian acculturation orientation will predict high levels of sociocultural adjustment as measured by school adjustment and invalid school absences.*

Research Question #2: Do friend and family support mediate the relation between acculturation and life satisfaction?

Previous research suggests a mediating role of social support on the relation between acculturation and mental health (Oppedal et al., 2004; Rodriguez et al., 2003; Shen & Tekeuchi, 2001). Although family and friend support both influence mental health and psychological adaptation in a positive direction (Castillo et al., 2004; Edwards & Lopez, 2006; Oppedal et al.; Rodriguez et al.), their roles may differ since parents typically encourage ethnic retention while peers typically encourage host culture exploration (Oppedal et al.). Based on the literature, the hypotheses below were examined. See Figure 2 for a visual description of the mediation model.

- Hypothesis #2a: *Family support will mediate the relation between Arab acculturation orientation and life satisfaction in the private domain, as measured by family satisfaction.*



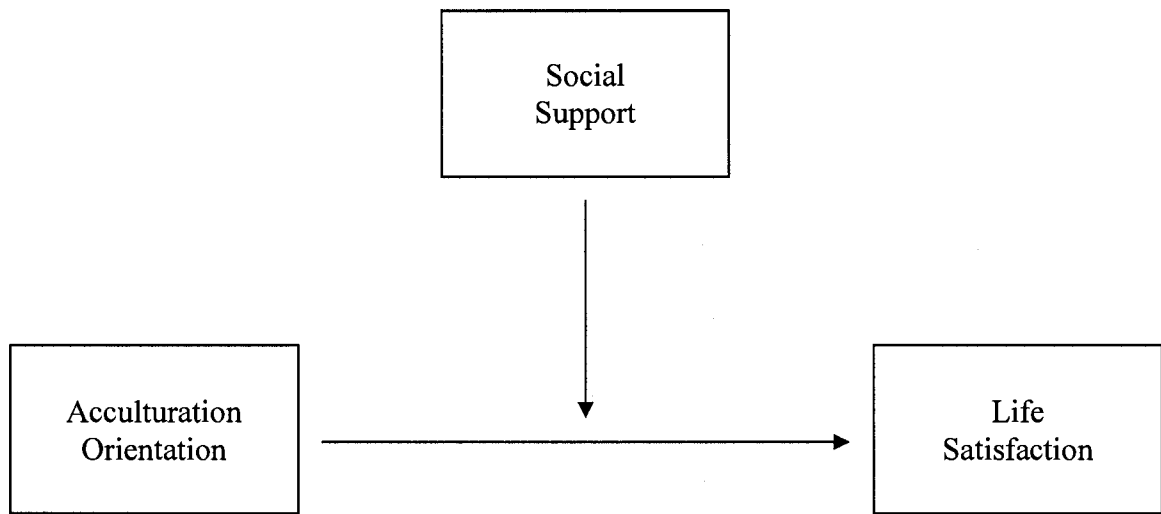
*Figure 2.* Mediation model.

- Hypothesis #2b: *Friend support will mediate the relation between European-Canadian acculturation orientation and life satisfaction in the public domain, as measured by friend, school, and living environment satisfaction.*

Research Question #3: Do friend and family support moderate the relation between acculturation and life satisfaction?

Oppedal and colleagues (2004) found that a decrease in family support in combination with a decrease in host culture competence yielded a strong negative relation with mental health. They also found that decreases in friend support in combination with decreases in heritage culture competence yielded a strong negative relation with mental health. However, low family support in combination with high host culture competence did not yield a strong negative relation with mental health. That is, family support moderated the relation between host culture competence and mental health. Their results further indicate that host culture competence was positively associated with family, friend, and class support suggesting that all sources of social support aid adolescents in their efforts to integrate into the dominant culture. Based on these findings, the hypotheses below were examined. See Figure 3 for a visual description of the moderation model.

- Hypothesis #3a: *Perceived family support will moderate the relation between European-Canadian acculturation orientation and global life satisfaction. That is, high levels of family support in combination with low levels of European-Canadian acculturation orientation will predict high levels of life satisfaction, and low levels of family support in combination with low levels of European-Canadian acculturation orientation will predict low levels of life satisfaction.*



*Figure 3.* Moderation model.



- Hypothesis #3b: *Perceived friend support will moderate the relation between Arab acculturation orientation and global life satisfaction. That is, high levels of friend support in combination with low levels of Arab acculturation orientation will predict high levels of life satisfaction, and low levels of friend support in combination with low levels of Arab acculturation orientation will predict low levels of life satisfaction.*

Research question #4: What gender differences are present in the acculturation process as measured by ethnic identity, and in social support strategies as measured by peer ethnicity?

Research suggests that Arab males have stronger ethnic identities than Arab females (Abu-Laban et al., 1999a; 1999b; Oppedal et al., 2005) and Arab males are more traditional compared to females (Oppedal et al.). Females, on the other hand, are more likely to integrate into the dominant culture more readily and develop greater host culture competence (Berry et al., 2006; Oppedal et al.). Also, research suggests that Arab males are more likely than Arab females to associate with other Arab youth (Abu-Laban & Abu-Laban, 1999b). Based on these studies, the following hypotheses were developed:

- Hypothesis #4a: *Males, compared to females, will report having stronger ethnic identities.*
- Hypothesis #4b: *Males, compared to females, will report associating with more Arab peers.*

## CHAPTER 2

### METHOD

#### *Participants*

A total of 99 eligible participants (74 females and 25 males) were recruited through university and CEGEP (Collège d'enseignement général et professionnel [College of General and Vocational Education]) student groups, online groups, online classified advertisements such as Kijiji.ca, the University of Windsor participant pool, and through the snowball effect. Emails were distributed to the heads of the organizations that included a brief description of the study, a link to the online site for the study, and a request that they post this link on their website (See Appendix A for a copy of the email that was sent). Recruitment efforts were primarily focussed in Ontario and Quebec because 85% of Arab-origin Canadians reside in these two provinces (Abu-Laban & Abu-Laban, 1999b). However, participants from outside Quebec and Ontario were recruited through the snowball effect and groups in every province and territory were contacted. See Table 1 for participant demographic breakdown.

#### *Measures*

Presented in Table 2 is a list of all the measures used in the present study and the variable names used in subsequent tables. The mean scores calculated for each measure are listed as well as standard deviations and range of possible and actual scores.

*Demographic Questionnaire.* A demographic questionnaire was used to obtain age, gender, ethnicity, generational status, place of birth, number of years residing in Canada, religion, marital status, and parental education and income. The questions were

Table 1

*Frequencies and Percentages of Demographic Variables (N = 99)*

	<i>n</i> (%)
<b>Religion</b>	
Muslim	20(20.2)
Catholic	74(74.7)
Other	4(4.0)
<b>Country of Heritage<sup>a</sup></b>	
Egypt	13(13.1)
Iraq	13(13.1)
Jordan	6(6.1)
Lebanon	36(36.4)
Saudi Arabia	1(1.0)
Syria	12(12.1)
Yemen	3(3.0)
Libya	1(1.0)
Sudan	1(1.0)
Morocco	1(1.0)
Tunisia	3(3.0)
Kuwait	4(4.0)
Algeria	7(7.1)
UAE	2(2.0)
Bahrain	1(1.0)

Table 1 (continued).

	<i>n</i> (%)
Qatar	1(1.0)
Oman	1(1.0)
Mauritania	0(0)
Somalia	0(0)
Palestine	23(23.2)
Djibouti	0(0)
Comoros	0(0)
Generation	
1 <sup>st</sup> generation	60(60.6)
2 <sup>nd</sup> generation	38(38.4)
> 2 <sup>nd</sup> generation	1(1.0)
Reason for immigrating to Canada	
Employment	12(12.6)
Education opportunities	38(40.0)
War, political unrest in home country	1(.01)
All of the above reasons	1(.01)
Education and employment	3(.03)
Other	3(.03)
Don't know	5(5.3)

---

Table 1 (*continued*).

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	<i>n</i> (%)
<hr/>	
Parents live in Canada	
Yes	89(89.9)
No	10(10.1)
Live with parents	
Yearlong	68(68.7)
Only in the summer	18(18.2)
Do not live with parents	13(13.1)

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*Note.* <sup>a</sup> Participants may have indicated more than one heritage country.

Table 2

*List of Measures with their Range of Scores, Means, and Standard Deviations*

	Variable Name	Range of Possible Scores (Range of Actual Scores)	<i>M</i>	<i>SD</i>
<b>Background Information</b>				
Language Proficiency <sup>a</sup> (Kwak, 1991, as cited in Berry et al., 2006)				
Arab	ArabProf	1-5(1.00-5.00)	3.67	1.16
English	EngProf	1-5(4.00-5.00)	4.91	.24
French	FrenProf	1-5(1.00-5.00)	2.77	1.39
Number of close friends <sup>a</sup> (Berry et al., 2006)				
Of Arab descent	#ArabFr	1-5(1.00-5.00)	4.14	1.10
Of European-Canadian descent	#EuroFr	1-5(1.00-5.00)	3.61	1.27

Table 2 (continued).

	Variable Name	Range of Possible Scores (Range of Actual Scores)	<i>M</i>	<i>SD</i>
Of other descent	#OtherFr	1-5(1.00-5.00)	4.00	1.06
Perceived Parental Acculturation Behaviors				
Scale <sup>a</sup> (Henry et al., 2006)				
Perceived Parental Openness to European- Canadian culture	PPO	0-4(.38-3.88)	1.94	.73
Perceived Parental Preservation of Arab culture	PPP	0-4(.25-3.62)	1.98	.75
Perceived Parental Controlling Behaviours <sup>a</sup>	PPCB	1-5(1.00-5.00)	3.13	1.21
Ethnic Identity				
Arab Ethnic Identity Measure <sup>a</sup> (Barry et al., 2000)	AEIM	1-5(2.82-6.52)	4.95	.83

Table 2 (continued).

	Variable Name	Range of Possible Scores (Range of Actual Scores)	<i>M</i>	<i>SD</i>
<b>Acculturation Orientation</b>				
Acculturation Index <sup>b</sup> (Ward & Rana-Deuba, 1999)				
Arab Orientation	AI_Arab	1-7(1.05-6.57)	5.00	1.03
European-Canadian Orientation	AI_Euro	1-7(1.86-6.95)	4.35	1.10
<b>Social Support<sup>a</sup></b>				
Perceived Social Support from Family (Procidano, & Heller, 1983)	PSS-Fa	1-5(1.06-5.00)	3.74	.94
Perceived Social Support from Friends (Procidano, & Heller, 1983)	PSS-Fr	1-5(2.00-4.95)	3.86	.56
<b>Psychological Adjustment</b>				



Table 2 (continued).	Variable Name	Range of Scores	<i>M</i>	<i>SD</i>
Multidimensional Student Life Satisfaction	MSLSS	1-4(2.05-3.90)	3.14	.41
Scale <sup>a</sup> (Huebner, 1994)				
Friend	Friend	1-4(1.00-4.00)	3.48	.48
Family	Family	1-4(1.44-4.00)	2.93	.72
Living Environment	LivEnv	1-4(1.22-4.00)	2.93	.70
School	School	1-4(1.00-4.00)	3.08	.62
Self	Self	1-4(1.86-4.00)	3.25	.54
Sociocultural Adjustment				
School Adjustment <sup>a</sup> (ICSEY: Berry et al., 2006)	SchAdj	1-5(1.50-5.00)	3.67	.72
Invalid School Absences <sup>a</sup> (ICSEY: Berry et al., 2006)	absences	1-5(1.00-5.00)	2.71	1.14

Note. <sup>a</sup>*N* = 99, Males: *n* = 25, Females: *n* = 74. <sup>b</sup>*N* = 98, Males: *n* = 25, Females: *n* = 73.

presented in such a way that participants either chose the response that described their situation or marked 'other' and were given the option to specify.

*National and Ethnic Language Proficiency and Usage* (Kwak, 1991, as cited in Berry et al., 2006). This self-report questionnaire about language proficiency inquires about a person's ability to understand, speak, read, and write in their ethnic language and in the language of the dominant culture. For the purposes of this study, the ethnic language was indicated as Arabic and the languages of the dominant culture included both English and French. An example is: "How well do you speak Arabic?" Participants indicated their answer on a 5-point scale ranging from (1) "not at all" to (5) "very well." Average scores were computed to determine language proficiency in Arabic, English, and French.

*Arab Ethnic Identity Measure (AEIM)* (Barry et al., 2000). The AEIM (originally named the Male Arab Ethnic Identity Measure (MAEIM)) is the only Arab North-American ethnic identity measure that has been published in the academic literature. Items on the MAEIM were generated from themes that emerged from 10 in-depth semi-structured interviews conducted with male Arabic immigrants who were attending a university in the United States (Barry, 1996 as cited by Barry et al., 2000). In addition, items from Phinney's Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992) and Zak's Arab Identity Scale (AIS) (Zak, 1976) were included. The Arab students also provided feedback concerning the themes and question clarity.

The final MAEIM is comprised of 33 items divided into four subscales: Religious-Family Values (RFV; 14 items), Sense of Belonging/Ethnic Pride (EP; 7 items), Friendship (F; 7 items), and Ethnic Arab Practices (EAP; 5 items). Sample

questions include: “I eat Arabic food every week”, “I would risk dying for my close friends”, “I have never doubted that God exists”, and “I am very proud of my Arabic background.” Items are scored on a 7-point Likert scale ranging from (1) “strongly disagree” to (7) “strongly agree.” Although Barry et al. (2000) obtained total and scale scores by summing the reverse scored and positive scored items, for the purpose of the current study an average score for overall ethnic identity was computed from the reverse scored and positive scored items. Higher scores indicated a stronger ethnic identity.

Because the MAEIM was originally developed for a male population, three items were revised by Amer (2002) due to the inclusion of female participants in her sample. These revisions were also used in the current study. For question 13 (“If one of my friends had borrowed money from me but had not paid me back, I would not ask him to return the money”), the word “him” was exchanged for “him or her.” Similarly, for question 22 (“I would immediately stop my work or study to help out a friend (e.g., if his car broke down)”), the word “his” was exchanged for “his or her.” For question 15, the item “I would never allow my wife to have an abortion” was rephrased to: “I would never allow my wife to have an abortion/ I would never have an abortion.”

Reported internal consistency reliabilities (Cronbach’s alpha) were .89 for Religious-Family Value, .81 for Sense of Belonging/Ethnic Pride, .69 for Friendship, and .69 for Ethnic Arab Practices (Barry et al., 2000). Item-total correlations ranged from .35 to .74 for Religious-Family Value, from .43 to .62 for Sense of Belonging/Ethnic Pride, from .42 to .58 for Friendship, and from .40 to .48 for Ethnic Arab Practices (Barry et al.). Validity studies were not conducted (Barry et al.).

The present study only looked at the total ethnic identity score and its Cronbach's alpha was .87.

*Acculturation Measures: Overview.* There has been some debate within the literature concerning the measurement of acculturation. Berry and colleagues (1989) constructed their acculturation scale to reflect the four acculturation orientations (integration, assimilation, separation, and marginalization). Ward and Rana-Deuba (1999) argue that these types of scales are limited in their ability to measure the two dimensions of acculturation separately. These dimensions are: the maintenance of cultural identity and maintenance of relations with other groups.

As part of a larger project, participants in the current study were administered two acculturation measures. The first scale, the Arab Acculturation Scale (Barry, 2005), is the only scale that was developed using an Arab population and provides scores for the four acculturation orientations. The second scale, the Acculturation Index (Ward & Rana-Deuba, 1999), provides independent scores for the two dimensions of acculturation. It was developed for usage with multi-national groups of sojourners or migrants. Although both measures were administered, the results of the Arab Acculturation Scale (Barry) will not be considered for the purposes of the current study. The hypotheses for the current study were tested using the Acculturation Index because this measure clearly defines scores on both heritage and host acculturation dimensions, thus reflecting the bi-dimensional construct of acculturation that Berry et al. (1989) have defined.

*Acculturation Index* (Ward & Rana-Deuba, 1999). This acculturation measure independently assesses the two dimensions of acculturation (heritage culture identification and host culture identification). Respondents are presented with 21

cognitive and behavioural items (e.g., clothing, pace of life, general knowledge, food, and religious beliefs). For each item they are asked to consider two questions: (1) “Are my experiences and behaviours similar to those of typical Euro-Canadian people?”; (2) “Are my experiences and behaviours similar to those of typical Arab people?”. Respondents rated their similarity to both host and heritage cultures on a 7-point scale ranging from (1) “not at all” to (7) “extremely”. Average scores were computed to obtain an Arab acculturation orientation score and a European-Canadian acculturation orientation score. Using a bipartite split, it was also possible to categorize responses to represent the four acculturation orientations (Ward & Kennedy, 1994).

Using Cronbach’s alpha, Ward and Kennedy (1994) obtained internal consistency scores of .93 and .96 for heritage culture identification and host culture identification, respectively. They also obtained a low correlation between heritage and host culture identification scores ( $r = .23$ ) suggesting that these two scales are independent.

The present study found similar results. The internal consistency scores were .93 and .92 for European-Canadian culture and Arab culture identification, respectively. A low correlation between European-Canadian and Arab acculturation orientations was also present in the current study ( $r = -.10$ , ns).

*Ethnic Peer Contact and National Peer Contact* (Berry et al., 2006). From this scale, one main question that was divided into three sub-questions was used to assess the frequency of interaction with peers of Arab descent, peers of Canadian heritage, and peers of other ethnic backgrounds. This question is: “How many close Arabic, Canadian, and friends of other ethnic groups do you have?” Participants were asked to provide their

answers for each ethnic group based on a 5-point scale ranging from (1) “None” to (5) “Many.” Average scores were computed.

*Perceived Parental Controlling Behaviour.* Participants were asked: “How much do you feel that your parents control your behaviours and your decisions?” They marked one of the following 5 options as their answer: “Not at all,” “Not very often,” “Half of the time,” “Most of the time,” or “All of the time.”

*Perceived Parental Acculturation Behaviors Scale (PPABS)* (Henry, Biran, & Stiles, 2006). This bi-dimensional measure of acculturation was designed to measure Arab-American college students’ perceptions of their parents’ acculturation orientations. Items for this measure were derived from informal electronic interviews via Internet chat rooms or one-to-one messaging. Twenty items were then administered to 90 Arab-American college students. Four items were then deleted because they were statistically or conceptually inconsistent with the final scales. The final measure included 16 items divided into two 8-item subscales: Perceived parental openness (PPO) and perceived parental preservation (PPP). The PPO subscale assesses the degree to which Arab-American parents are perceived to be open to exposing themselves and their children to American culture and activities. The PPP subscale assesses the degree to which Arab-American parents are perceived by their children to want to preserve their native Arab culture for themselves and for their children. Sample questions include: “Do your parents urge you to adopt an American lifestyle” (PPO subscale) and “Do your parents visit their countries of birth” (PPP subscale). Since the current study was conducted with an Arab-Canadian population, the term American was replaced with Canadian on the 7 questions that required this change. Also, question 9 states: “Do your parents celebrate major

American holidays (e.g., 4<sup>th</sup> of July, Labor Day, Thanksgiving Day)?” Not only was “American” replaced with “Canadian”, but “4<sup>th</sup> of July” was replaced with “Canada Day.” Items were scored on a 5-point Likert-type scale (0 = never, 1 = rarely, 2 = occasionally, 3 = frequently, 4 = always). Average scores were computed for the two subscales.

The PPO and PPP subscales have good internal consistency (Cronbach’s alpha), .89 and .81, respectively (Henry et al., 2006) and the two subscales are uncorrelated ( $r = -.13$ , ns), supporting the bi-dimensional conceptualization of acculturation (Henry et al.). Henry and colleagues reported that the number of years living in the United States significantly positively correlated with the PPP subscale ( $r = .31$ ) and negatively correlated with the PPO subscale ( $r = -.34$ ). Responses provided from students who were born in the United States were not significantly different than the responses provided by students who were born in Arab countries, making this measure relevant for the present study as the sample included Arab-Canadians of different generations (Henry et al.).

The present study also had good internal consistency (Cronbach’s alpha) for the PPO,  $\alpha = .76$ , and PPP,  $\alpha = .69$ , subscales. However, in the current sample the two subscales were significantly negatively correlated,  $r = -.50$ ,  $p < .001$ .

*Perceived Social Support from Friends (PSS-Fr) and from Family (PSS-Fa)* (Procidano, & Heller, 1983). The PSS-Fr and PSS-Fa are self-report measures of emotional support provided by or available from friends or family. Each measure contains 20 questions. Sample questions on the PSS-Fr measure include: “My friends give me the moral support I need”, “I think that my friends feel that I’m good at helping them solve problems”, and “My friends seek me out for companionship.” Sample

questions on the PSS-Fa include: “My family gives me the moral support I need”, “Members of my family are good at helping me solve problems”, and “Members of my family seek me out for companionship.” The PSS-Fr and PSS-Fa have excellent reported psychometric properties. They are internally consistent with Cronbach’s  $\alpha$  of .88 and .90, respectively (Procidano, & Heller).

The response options on the original questionnaires were ‘Yes’, ‘No’, or ‘Don’t Know.’ Instead of using these options, participants in the current study were directed to mark their answer on a 5-point Likert scale ranging from (1) “Strongly Disagree” to (5) “Strongly Agree.” The intention was to obtain a greater degree of variability by using this scale. Negatively keyed items were reverse scored and the average scores were computed. Higher scores indicated greater levels of perceived support. The current study also had excellent internal consistency as measured by Cronbach’s  $\alpha$  for the PSS-Fr,  $\alpha = .89$ , and PSS-Fa,  $\alpha = .96$ , scales.

*Multidimensional Student Life Satisfaction Scale (MSLSS)* (Huebner, 1994). The MSLSS is a 40-item self-report measure of life satisfaction. Scores can be computed for global life satisfaction and life satisfaction in five domains pertinent to the lives of adolescents: Family (7 items), School (8 items), Friends (9 items), Self (7 items), and Living Environment (9 items). Sample questions include: “I enjoy being at home with my family,” “My friends treat me well,” “I look forward to going to school,” “I like where I live,” and “I think I am good looking.” Items were scored on a 6-point Likert-type scale (1 = strongly disagree; 2 = moderately disagree; 3 = disagree; 4 = agree; 5 = moderately agree; 6 = strongly agree) (Huebner, Laughlin, Ash, & Gilman, 1998). Negatively keyed



items were reverse scored and the average scores were computed. Higher scores indicated higher levels of life satisfaction throughout the scale.

The MSLSS has been used effectively with youth in grades 3 to 12 (Gilman, Huebner, & Laughlin, 2000; Greenspoon & Saklofske, 1997; Huebner, 1994; Huebner et al., 1998). Although participants in the current study were not required to be students, the age range sought was of student age, therefore this measure seemed appropriate. The MSLSS has internal consistency (alpha) coefficients that range from the .70s to low .90s (Greenspoon & Saklofske, 1997; Huebner; Huebner et al.). Test-retest coefficients for two- and four-week time periods fall for the most part within the .70 to .90 range (Huebner et al.; Terry & Huebner, 1995). Exploratory factor analyses support the dimensionality of the MSLSS (Huebner). Furthermore, confirmatory factor analyses have provided support for the multidimensional, hierarchical model with general life satisfaction at the apex as the highest order factor, and the five specific domains appearing within that factor (Gilman et al.; Huebner et al.). Research has generalized this measure to school age students in Canada (Greenspoon & Saklofske) and has supported its use with individualistic as well as collectivistic societies (Park, Huebner, Laughlin, Valois, & Gilman, 2004). Convergent and discriminant validity have also been demonstrated with other self-report well-being indices (Gilman et al.; Greenspoon & Saklofske; Huebner; Huebner et al.), parent reports (Gilman & Huebner, 1997), teacher reports (Huebner & Alderman, 1993), and social desirability scales (Huebner et al.). Weak relations between this measure and demographic variables (e.g., age, gender) have also been found (Huebner; Huebner et al.).

The measures for internal consistency, as measured by Cronbach's  $\alpha$ , for the current study were: .92 for global life satisfaction, .90 for family satisfaction, .87 for satisfaction with friends, .88 for satisfaction with school, .89 for satisfaction with one's living environment, and .84 for satisfaction with the self.

Based on Abu-Laban and Abu-Laban's (1999b) conceptualization of private and public life spheres, for the present study, the mean value of life satisfaction in the friend, school, and living environment domains was generated to obtain a variable assessing public life satisfaction ( $\alpha = .91$ ). Family satisfaction was used to assess life satisfaction in the private domain.

In the present study, a self-report measure of adaptation seemed especially useful because individuals with Arab ethnic backgrounds may have different ideologies of what exemplifies a good life as compared to North American norms. Furthermore, it has been argued that different modes of acculturation are adaptive in different contexts because different skills and knowledge are required (Birman, 1998; Oetting & Beauvais, 1990-1991). Therefore, using the MSLSS, it was possible to measure Arab youths' adjustment in five areas (family, school, friends, self, and living environment).

*Sociocultural Adjustment* (ICSEY: Berry et al., 2006). Two measures of sociocultural adjustment were used in the current study. First, a 6-item school adjustment measure developed for the ICSEY project (Berry et al.) was used. Sample items include: "I have problems concentrating in class" and "I feel uneasy about going to school in the morning." Participants marked their responses on a 5-point scale ranging from (1) "Strongly Disagree" to (5) "Strongly Agree." Negatively keyed items were reverse scored and average scores were computed. Higher scores indicated better school adjustment.

This measure had internal consistency (alpha) coefficients of .65 and .68 for immigrant and national samples, respectively, in the ICSEY study. The internal reliability (Cronbach's alpha) with the current study's sample was .67.

The current study also asked participants to report how often they had been absent from school all day or part of the day without a valid reason. The scale ranged from (1) "Never" to (5) "A few times a week." The average score for the current sample was 2.71.

Two other questions were asked that were also taken from the ICSEY study, however, they were not used in the analyses. Participants were asked to report their grade point average and were asked to indicate on a scale ranging from poor to good, how they thought their teachers judged their school performance. Because schools report grade point averages differently, so did the participants in the current study. Therefore, this question was not a reliable measure of sociocultural adjustment.

*Perceptions of Media.* For the purpose of the current study, participants were asked to indicate the media sources they used to obtain international news stories. Response options were: "Western media sources (e.g., Canadian newspapers, radio stations, TV news channels)", "Arab transnational satellite channels (e.g., Al-Jazeera, Arab Radio and Television (ART), the Middle East Broadcasting Center (MBC))", "Other news sources", and/or "I do not follow the news." Participants were also asked how accurately they believed Western media portrayed Arabs. Participants indicated their responses on a 7-point scale ranging from (1) "Not at all accurate" to (7) "Extremely accurate."

### *Procedure*

After ethics clearance by the University of Windsor Research Ethics Board, emails were distributed to the heads of online Arab groups and student organizations. These groups were identified from University websites, yahoo groups, google groups, and facebook groups. Participants were also recruited from online classified advertisements (kijiji.ca, craigslist.org, and usedmontreal.com), the University of Windsor participant pool, and through the snowball effect. Potential participants were directed to a website where they could access the survey. Since this study involved minimal risk, participants consented by checking the box “I agree to participate.” A copy of the consent form is in Appendix B.

In an attempt to clarify terms used in the survey, after consenting to participate, participants were provided with the definitions of European-Canadian and Arab/Middle Eastern Canadian. The definition of Arab/Middle Eastern Canadian was based on Abu-Laban’s (1980) definition and stated: ‘An individual “who originated, directly or indirectly, from any of the Arab states and whose roots are in the Arabic language and culture”. This definition includes all religious denominations.’ The definition of European-Canadian mirrored the Arab/Middle Eastern-Canadian definition stated: ‘Canadian of European descent whose roots are in the Canadian culture.’

A “leave the study” link appeared on every page of the survey. If participants wished to quit before finishing, they could do so by clicking this link. Upon completion of the study, participants were apprised of its purpose and were relayed the email address of the principal investigator in the event that they wished to know more about this project or if they felt that they experienced some harm as a result of the study. This debriefing

information was also available to participants if they chose to leave the study before completing it (See Appendix C for a copy of the debriefing form). After reading the debriefing form, participants were able to enter their email address in a draw for a \$50 gift certificate at amazon.ca. When this study first began, the gift certificate was for a popular bookstore, Chapters. However, given the feedback received from leaders of two groups, it was decided to change the gift certificate to amazon.ca. After following up on the concern of these two group leaders, it was found that the two majority owners of Chapters and Indigo bookstores founded the “Heseg Foundation for Lone Soldiers,” which offers financial support to young Jews who immigrate to Israel alone and join the army. Given the deep-rooted conflict between Israelis and Palestinians, it was decided to change the gift certificate to one that was more neutral.

## CHAPTER 3

### RESULTS

Preliminary analyses were conducted to examine for duplicate protocols, ineligible participants, and missing data. Assumptions specific to regression analyses and ANOVA were also tested before addressing the specific hypotheses. Hierarchical multiple regression analyses and one-way ANOVAs were conducted to test the hypotheses. Additional exploratory analyses were also conducted.

#### *Preliminary Analyses*

##### *Data Screening*

A total of 153 protocols were registered in the database. Before running analyses, the data were examined for possible duplicate protocols, ineligible participants, and missing data. Although the program used for data collection prevented the tracking of IP addresses, protocols were compared based on key demographic variables such as birth date, gender, and age for duplicates. Three duplicates were identified. Twelve forms had no data entered and were therefore eliminated from analyses. Some group leaders who were contacted expressed interest in viewing the questionnaire before forwarding the flyer to members of their listserv and were directed to the website. Therefore, a number of these blank forms may have resulted from group leaders viewing the questions. Nine participants completed the survey but were ineligible; 6 were too old, 1 did not include her age, 1 was not of Arab heritage, and 2 did not live in Canada. Although one participant failed to answer a large number of the questions throughout the survey and was therefore eliminated from analyses, the primary reason for missing data was incomplete submissions. Of the 129 eligible participants who completed the background

information, 7 did not continue after this first page, 110 completed the first half, and 99 completed the entire questionnaire. It was decided that the analyses would include only the 99 remaining participants who completed the Multidimensional Student Life Satisfaction Scale, as this measure was the main dependent variable for the hypotheses. Of these 99 participants ( $M$  age = 19.11,  $SD$  = 1.48, range = 15-21), 74 were female ( $M$  age = 19.20,  $SD$  = 1.42, range = 15-21) and 25 were male ( $M$  age = 18.84,  $SD$  = 1.65, range = 16-21).

#### *Assumptions for Regression Analyses*

Assumptions specific to regression analyses and ANOVA were tested before addressing the specific hypotheses. The assumptions for regression analyses are: adequate sample size, absence of outliers and influential observations, absence of multicollinearity and singularity, normality, linearity, homoscedasticity of errors, and independence of errors (Tabachnick & Fidell, 2007). To test these assumptions, a linear regression was conducted on the 99 participants with the following variables entered as predictors: Arab ethnic identity, European orientation, Arab orientation, perceived social support from friends, perceived social support from family, and mean life satisfaction. Age was entered as the dependent variable. With 99 protocols included, the present study's sample size was adequate. Outliers on the criterion variable were tested using standardized residuals. One value was greater than 2.5 standard deviations from the mean. It was not excluded because its inclusion did not affect the analyses. No participants had Mahalanobis distances greater than the critical Mahalanobis distance of 11.07 ( $df = 5$ ) and therefore no outliers on predictor variables were identified. To test

influential observations, Cook's Distance and DEFITs were used. No values were greater than 1 and therefore no influential observations were identified.

Multicollinearity occurs when two predictor variables are correlated with each other and this causes a large standard error (Tabachnick & Fidell, 2007). Singularity is an extreme form of multicollinearity (Tabachnick & Fidell). That is, singularity exists when one predictor can be predicted by other predictors. Several indicators of multicollinearity were examined and this assumption did not appear violated. No correlations between predictor variables were larger than  $r = .80$ , see correlations presented in Table 3. Also, variance inflation factors (VIF) were less than 10, tolerance values were less than 1, and Eigenvalues were close to zero. Therefore, multicollinearity was not present.

To assess normality, linearity, and homoscedasticity of errors, the residuals scatterplot between predictor dependent variable scores and errors of predictions was examined. These three assumptions were met, as the residual scatterplot of the criterion was rectangularly/ovally distributed with a concentration of scores along the centre.

Because the majority of the data were collected via a web-survey and it was not possible to control for friends or siblings watching each other complete the questionnaires, it is difficult to assume independence of errors. However, the data show that this assumption of independence of errors was likely accurate. First, very few questionnaires were completed around the same time frame suggesting independence of errors. Second, cases were entered in order and a plot of residuals against sequence of cases was requested. This assumption did not seem to be violated, as the points across all cases appeared randomly distributed after visual inspection. Third, the Durbin-Watson



Table 3

*Zero Order Correlations between Variables (N = 99)*

	1	2	3	4	5
1. AEIM	-				
2. AI_Euro	-.21*	-			
3. AI_Arab	.72**	-.10	-		
4. PSS-Fa	.33**	.16	.40**	-	
5. PSS-Fr	.14	.12	.16	.17	-
6. MSLSS	.17*	.25*	.24*	.58**	.55**

*Note.* AEIM = Arab Ethnic Identity; AI\_Euro = European-Canadian Acculturation

Orientation; AI\_Arab = Arab Acculturation Orientation; PSS-Fa = Perceived Social

Support from Family; PSS-Fr = Perceived Social Support from Friends; MSLSS = Global

Life Satisfaction.

\* $p < .05$ . \*\* $p < .01$ .

statistic was 1.95, which is within the range of acceptable values indicating that this assumption was confirmed.

#### *Assumptions for ANOVAS*

The fourth research question addresses gender differences in ethnic identity and peer relationships. Therefore, the assumptions specific to one-way ANOVAs were tested. These include: independence of observations, normality, and homogeneity of variance (Tabachnick & Fidell, 2007). Sphericity was not tested because the comparisons were between two groups (Tabachnick & Fidell). As discussed in the previous section, independence of observations can be assumed. Data for the number of peers from an Arab background were negatively skewed as demonstrated by the histogram. Analyses are however, robust against this violation (Tabachnick & Fidell). Data for the ethnic identity measure were normally distributed as demonstrated by the histogram. Homogeneity of variance was assumed since Levene's test of equality of error variance was not significant for either number of close Arab friends ( $F(1,97) = 3.31, p = .07$ ) or for Arab ethnic identity ( $F(1,97) = 3.56, p = .06$ ). Group sizes, however, differed greatly with 25 males and 74 females in the sample. This difference decreased the power of these analyses (Tabachnick & Fidell).

Overall, the current data were fit for the analyses. None of the assumptions specific to regression analyses were violated, however, two assumptions specific to ANOVAs required further review. First, although there were minor violations for normality, this assumption is robust. Second, many more females completed the survey than males, which affected the power of the analyses.

### *Hierarchical Multiple Regression Analyses*

Correlations between key demographic variables (i.e., gender, age, number of siblings, living situation during the school year and during the summer, generation status, religion, number of Arab, European and other ethnic-Canadian friends, Arab, English, and French proficiency, perceived parental controlling behaviours, and perceived parental acculturation) and criterion variables (i.e., mean life satisfaction, life satisfaction in the five domains, school adjustment, and invalid school absences) were calculated to determine which variables would be statistically controlled for in each regression (see Tables 4 and 5). Demographic variables that were significantly correlated with a criterion variable were flagged and entered in the first level of the regression analyses conducted to test the hypotheses specific to that criterion variable.

### *Main Analyses*

*Research Question #1: How is acculturation and ethnic identity related to psychological adjustment in various domains (family, school, friends, self, and living environment) and sociocultural adjustment?*

Five hierarchical multiple regression analyses were conducted to address psychological adjustment and two hierarchical multiple regressions were conducted to address sociocultural adjustment. Correlations between predictor and criterion variables for all regression analyses are presented in Table 6.

*Psychological adjustment: Family domain.* To assess whether having a strong positive ethnic identity and Arab culture orientation predicted satisfaction in the family domain, a hierarchical multiple regression analysis was conducted with family satisfaction entered as the criterion variable (see Table 7). Number of Arab friends was

Table 4

*Zero Order Correlations of Demographic Variables with Ethnic Identity, Acculturation, and Perceived Social Support from Friends and Family (N = 99)*

	AEIM	AI_Euro	AI_Arab	PSS-Fr	PSS-Fa
Age	.19	.22*	.11	.06	.15
Gender	-.23*	.16	.00	.13	.08
# of siblings	.09	-.18	.02	.02	.01
Living situation	.08	-.04	.16	.23*	-.15
Generation	-.14	.14	-.21*	-.06	-.01
Religion	-.07	-.11	-.06	.11	.01
#ArabFr	.52**	-.13	.46**	.25*	.23*
#EuroFr	-.15	.44**	-.14	.10	.16
#OtherFr	-.08	.17	-.07	.12	.05
ArabProf	.54**	-.18	.43**	.10	.10
EngProf	-.11	.15	-.04	.16	.07
FrenProf	-.11	.20	-.06	.09	.17
PPCB	.04	.00	.15	-.13	-.17
PPP	.37**	-.09	.35**	.00	.12
PPO	-.25*	.29**	-.24	.02	.18

*Note.* AEIM = Arab Ethnic Identity; AI\_Euro = European-Canadian Acculturation Orientation; AI\_Arab = Arab Acculturation Orientation; PSS-Fr = Perceived Social Support from Friends; PSS-Fa = Perceived Social Support from Family; PPCB = Perceived Parental Controlling Behaviour; PPABS\_PPP = Perceived Parental Preservation of Arab culture; PPABS\_PPO = Perceived Parental Openness to the European-Canadian culture.

\* $p < .05$ . \*\* $p < .01$ .

Table 5

*Zero Order Correlations for Demographic Variables with Global Life Satisfaction, Life Satisfaction in the Various Domains, School Adjustment, and School Absences (N = 99)*

	Global	Family	Friend	School	LivEnv	Self	SchAdj	Abs.
Age	.07	.06	-.18	.10	.16	.02	-.02	.21*
Gender	-.01	-.09	.00	.10	.02	-.06	.08	-.17
#Sibs	-.03	-.02	-.04	-.08	.04	.00	-.07	.18
LivSit	.07	-.15	.23*	.06	.03	.10	.10	-.08
Generation	-.09	-.03	-.12	-.02	-.12	-.01	.05	.06
Religion	.03	.07	-.06	.05	-.09	.19	.08	-.03
#ArabFr	.18	.22*	.08	.03	.09	.18	-.01	.03
#EuroFr	.21*	.08	.10	.22*	.19	.11	.15	-.17
#OtherFr	.10	-.01	.13	.14	.02	.05	.05	-.06
ArabProf	.10	.18	-.03	.01	.04	.15	-.02	-.08
EngProf	.16	-.02	.24*	.18	.05	.13	.14	-.02
FrenProf	-.01	.13	-.06	-.03	-.04	-.02	-.03	-.25*
PPCB	-.22*	-.16	-.10	-.14	-.25*	-.03	-.13	.10
PPP	-.20*	-.11	-.08	-.14	-.20*	-.10	-.30**	.06
PPO	.25*	.17	.00	.18	.26**	.16	.17	-.09

*Note.* Global = Global Life Satisfaction; Family = Family Satisfaction; Friend = Friend Satisfaction; School = School Satisfaction; LivEnv = Living Environment Satisfaction; Self = Life Satisfaction with Self; SchAdj = school adjustment; Abs. = frequency of invalid school absences; #Sibs = number of siblings; LivSit = living situation; #ArabFr = the number of Arab friends; #EuroFr = the number of European-Canadian friends; #OtherFr = the number of friends of other ethnicities; ArabProf = Arab proficiency; EngProf = English proficiency; FrenProf = French proficiency; PPCB = Perceived Parental Controlling Behaviour; PPP = Perceived Parental Preservation of Arab culture; PPO = Perceived Parental Openness to the European-Canadian culture.

\* $p < .05$ . \*\* $p < .01$ .

Table 6

*Zero Order Correlations between Predictor and Criterion Variables for Regression**Analyses (N = 99)*

	Psychosocial Adjustment (Life Satisfaction)						Sociocultural Adjustment	
	Global	Family	Friend	School	LivEnv	Self	SchAdj	Abs.
	AEIM	.17	.39**	.07	-.12	.10	.12	-.22*
AI_Arab	.24*	.43**	.08	-.07	.14	.22*	-.08	-.02
AI_Euro	.25*	.04	.04	.32**	.30**	.06	.17	-.23*
PSS-Fr	.55**	.15	.61**	.24*	.38**	.52**	.25*	-.18
PSS-Fa	.58**	.82**	.07	.18	.45**	.31**	.11	-.16

*Note.* Global = Global Life Satisfaction; Family = Family Satisfaction; Friend = Friend Satisfaction; School = School Satisfaction; LivEnv = Living Environment Satisfaction; Self = Life Satisfaction with Self; SchAdj = school adjustment; Abs. = frequency of invalid school absences; AEIM = Arab Ethnic Identity; AI\_Arab = Arab Acculturation Orientation; AI\_Euro = European-Canadian Acculturation Orientation; PSS-Fr = Perceived Social Support from Friends; PSS-Fa = Perceived Social Support from Family.

\* $p < .05$ . \*\* $p < .01$ .

Table 7

*Summary of Hierarchical Regression Analyses for Ethnic Identity and Acculturation Orientation Predicting Life Satisfaction in the Various Domains (N = 99)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
<b>Family</b>					
Step 1				.05*	
#ArabFr	.15	.07	.22*		
Step 2				.21**	.16**
AEIM	.18	.12	.21		
AI_Euro	.08	.06	.11		
AI_Arab	.21	.10	.29*		
<b>Living Environment</b>					
Step 1				.11*	
PPCB	-.12	.06	-.20		
PPP	-.01	.11	-.01		
PPO	.21	.11	.22		
Step 2				.24**	.13**
AEIM	.09	.12	.11		
AI_Euro	.18	.06	.29**		
AI_Arab	.13	.09	.20		
<b>Friend</b>					
Step 1				.10**	
EngProf	.44	.20	.22*		

Table 7 (continued).

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
LivSit	.21	.10	.21*		
Step 2				.11	.01
AEIM	.05	.09	.09		
AI_Euro	.02	.05	.04		
AI_Arab	.00	.07	.00		
<hr/> School					
Step 1				.05*	
#EuroFr	.11	.05	.22		
Step 2				.11*	.06
AEIM	-.05	.11	-.07		
AI_Euro	.15	.06	.26*		
AI_Arab	.01	.09	.02		
<hr/> Self					
Step 1				.06	
AEIM	-.03	.10	-.05		
AI_Euro	.04	.05	.08		
AI_Arab	.14	.08	.26		

*Note.* AEIM = Arab Ethnic Identity; AI\_Euro = European-Canadian Acculturation Orientation; AI\_Arab = Arab Acculturation Orientation; PPCB = Perceived Parental Controlling Behaviour; PPP = Perceived Parental Preservation of the Arab Culture; PPO = Perceived Parental Openness to the European-Canadian Culture; EngProf = English proficiency; LivSit = living situation; #EuroFr = number of European-Canadian friends. \* $p < .05$ . \*\* $p < .01$ .



significantly correlated with life satisfaction in the family domain and therefore was entered in block 1 (see Table 5). The acculturation and ethnic identity measures were entered in block 2.

The regression model was significant ( $F(4, 93) = 6.27, p < .01$ ), and accounted for 21.2% of the variance in family life satisfaction (see Table 7). In block 1, a greater number of Arab friends significantly predicted greater family life satisfaction ( $F(1, 96) = 4.96, p < .05$ ), and accounted for 4.9% of the variance. Taken together, a strong ethnic identity and positive Arab and European-Canadian orientations significantly predicted greater family satisfaction, after controlling for number of Arab friends,  $F_{change}(3, 93) = 6.43, p < .01$ . An analysis of the standardized beta weights indicated that a more positive Arab acculturation orientation significantly predicted greater family satisfaction ( $\beta = .29, t(4, 93) = 2.17, p < .05$ ), but ethnic identity and European-Canadian acculturation orientation did not ( $\beta = .21, t(4, 93) = 1.47, p = .15$ ;  $\beta = .11, t(4, 93) = 1.21, p = .23$ , respectively).

*Psychological adjustment: Living environment domain.* To assess whether having a strong ethnic identity and a positive Arab acculturation orientation predicted satisfaction in the living environment domain, a hierarchical multiple regression analysis was conducted with satisfaction with one's living environment entered as the criterion variable (see Table 7). Perceived parental control, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture were significantly correlated with life satisfaction in the living environment domain and were therefore entered in block 1 (see Table 5). The acculturation and ethnic identity measures were entered in block 2.

The regression model was significant ( $F(6, 91) = 4.78, p < .01$ ), and accounted for 23.9% of the variance of the satisfaction of the living environment (see Table 7). In block 1, low perceived parental control, low perceived parental preservation of the Arab culture, and high perceived parental openness to the European-Canadian culture significantly predicted greater life satisfaction in the living environment domain ( $F(3, 94) = 3.86, p < .05$ ), and accounted for 11.0% of the variance. Taken together, stronger ethnic identity and positive Arab and European-Canadian orientations significantly predicted greater living environment satisfaction, after controlling for perceived parental control, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture,  $F_{change}(3, 91) = 5.17, p < .01$ . An analysis of the standardized beta weights indicated that greater European-Canadian acculturation orientation significantly predicted greater satisfaction with the living environment ( $\beta = .29, t(6, 91) = 2.96, p < .01$ ), but ethnic identity and Arab acculturation orientation did not ( $\beta = .11, t(6, 91) = .78, p = .44$ ;  $\beta = .20, t(6, 91) = 1.44, p = .15$ , respectively).

*Psychological adjustment: Friend domain.* To assess whether having a positive European-Canadian culture orientation predicted satisfaction in the friend domain, a hierarchical multiple regression analysis was conducted with friend satisfaction entered as the criterion variable (see Table 7). English proficiency and living situation were significantly correlated with life satisfaction in the friend domain and were therefore entered in block 1 (see Table 5). The acculturation and ethnic identity measures were entered in block 2.

The regression model approached significance, and accounted for 10.6% of the variance in life satisfaction with friends, ( $F(5, 91) = 2.16, p = .06$ ). In block 1, greater

English proficiency and living situation significantly predicted greater life satisfaction in the friend domain ( $F(2, 94) = 5.15, p < .01$ ), and accounted for 9.9% of the variance.

*Psychological adjustment: School domain.* To assess whether having a positive European-Canadian culture orientation predicted satisfaction in the school domain, a hierarchical multiple regression analysis was conducted with school satisfaction entered as the criterion variable (see Table 7). Number of European-Canadian friends was significantly correlated with life satisfaction in the school domain and was therefore entered in block 1 (see Table 5). The acculturation and ethnic identity measures were entered in block 2.

The regression model was significant ( $F(4, 93) = 2.89, p < .05$ ), and accounted for 11.1% of the variance in school life satisfaction (See Table 7). In block 1, greater number of European-Canadian friends significantly predicted greater life satisfaction in the school domain ( $F(1, 96) = 4.79, p < .05$ ), and accounted for 4.7% of the variance. Taken together, after controlling for number of European-Canadian friends, weaker ethnic identity and positive Arab and European-Canadian orientations approached significance in predicting greater school satisfaction ( $F_{change}(3, 93) = 2.20, p = .09$ ). An analysis of the standardized beta weights indicated that greater European-Canadian acculturation orientation significantly predicted greater school satisfaction ( $\beta = .26, t(4, 93) = 2.36, p < .05$ ), but ethnic identity and Arab acculturation orientation did not ( $\beta = -.07, t(4, 93) = -.46, p = .65$ ;  $\beta = .02, t(4, 93) = .11, p = .91$ , respectively).

*Psychological adjustment: Self domain.* To assess whether having positive European-Canadian and Arab culture orientations predicted satisfaction in the self domain, a hierarchical multiple regression analysis was conducted with satisfaction with

the self entered as the criterion variable (see Table 7). The acculturation and ethnic identity measures were entered in block 1.

The regression model was not significant, accounting for 5.5% of the variance in life satisfaction with the self,  $F(3, 94) = 1.84, p = .15$ . An analysis of the standardized beta weights indicated that positive Arab acculturation orientation approached significance in predicting greater satisfaction with the self,  $\beta = .26, t(3, 94) = 1.78, p = .08$ . Ethnic identity and European-Canadian acculturation orientation did not significantly predict satisfaction with the self ( $\beta = -.05, t(3, 94) = -.32, p = .75$ ;  $\beta = .08, t(3, 94) = .76, p = .45$ , respectively).

*Sociocultural adjustment: School adjustment.* Two regression analyses were conducted to predict sociocultural adjustment from acculturation orientations and ethnic identity. To assess whether having a positive European-Canadian culture orientation predicted school sociocultural adjustment, a hierarchical multiple regression analysis was conducted with school adjustment entered as the criterion variable (see Table 8). Perceived parental preservation of the Arab culture was significantly correlated with school adjustment and was therefore entered in block 1 (see Table 5). The acculturation and ethnic identity measures were entered in block 2.

The regression model was significant ( $F(4, 93) = 3.77, p < .01$ ), and accounted for 13.9% of the variance in school adjustment (see Table 8). In block 1, low perceived parental preservation of the Arab culture significantly predicted greater school adjustment ( $F(1, 96) = 4.55, p < .01$ ), and accounted for 9.0% of the variance. Taken together, ethnic identity and Arab and European-Canadian acculturation orientations did not significantly predict school adjustment, after controlling for perceived parental preservation of the

Table 8

*Summary of Hierarchical Regression Analyses for Ethnic Identity and Acculturation Orientation Predicting Sociocultural Adjustment (N = 99)*

Variable	B	SE B	$\beta$	$R^2$	$\Delta R^2$
<b>School Adjustment</b>					
Step 1				.09**	
PPP	-.29	.09	-.30**		
Step 2				.14**	.05
AEIM	-.22	.13	-.25		
AI_Euro	.08	.07	.12		
AI_Arab	.15	.10	.21		
<b>Invalid School Absences</b>					
Step 1				.09**	
Age	.14	.08	.18		
FrenProf	-.18	.08	-.22*		
Step 2				.16**	.06
AEIM	.07	.20	.05		
AI_Euro	-.26	.11	-.25*		
AI_Arab	-.13	.16	-.11		

*Note.* AEIM = Arab Ethnic Identity; AI\_Euro = European-Canadian Acculturation Orientation; AI\_Arab = Arab Acculturation Orientation; PPP = Perceived Parental Preservation of the Arab Culture; FrenProf = French proficiency.

\* $p < .05$ . \*\* $p < .01$ .

Arab culture,  $F_{change}(3, 93) = 1.79, p = .15$ . However, an analysis of the standardized beta weights indicated that weak Arab ethnic identity approached significance in predicting greater school adjustment ( $\beta = -.25, t(4, 93) = 1.71, p = .09$ ). Arab and European-Canadian acculturation orientation did not significantly predict school adjustment ( $\beta = .21, t(4, 93) = 1.46, p = .15$ ;  $\beta = .12, t(4, 93) = .119, p = .24$ , respectively).

*Sociocultural adjustment: Invalid school absences.* To assess whether having a positive European-Canadian culture orientation predicted the number of invalid school absences, a hierarchical multiple regression analysis was conducted with invalid school absences entered as the criterion variable (see Table 8). Age and French proficiency were significantly correlated with school absences and were therefore entered in block 1 (see Table 5). The acculturation and ethnic identity measures were entered in block 2.

The regression model was significant ( $F(5, 92) = 3.41, p < .01$ ), and accounted for 15.6% of the variance in school absences (see Table 8). In block 1, age and weak French proficiency significantly predicted greater school adjustment ( $F(2, 95) = 4.84, p = .01$ ), and accounted for 9.2% of the variance. Taken together, strong ethnic identity and negative Arab and European-Canadian acculturation orientations approached significance in predicting fewer school absences, after controlling for age and French proficiency,  $F_{change}(3, 92) = 2.32, p = .08$ . An analysis of the standardized beta weights indicated that greater European-Canadian acculturation orientation significantly predicted fewer invalid school absences,  $\beta = -.25, t(5, 92) = -2.41, p < .05$ . Arab acculturation orientation and Arab ethnic identity did not significantly predict school absences ( $\beta = -.11, t(5, 92) = -.81, p = .42$ ;  $\beta = .05, t(5, 92) = .34, p = .74$ , respectively).

*Research question 1: Summary of results.* With reference to Arab youth psychological adjustment, having a positive orientation toward one's Arab heritage significantly predicted greater satisfaction with one's family and approached significance in predicting greater satisfaction with the self. Having a positive attitude toward European-Canadian culture significantly predicted greater satisfaction with school and with one's living environment. These results generally support the hypotheses. First, the hypothesis that high levels of Arabic acculturation orientation would relate to high levels of satisfaction on the family domain was supported. The family is considered a private domain and therefore this shows that having an Arab orientation is related to satisfaction in the private sphere. Second, the hypothesis that high levels of European-Canadian acculturation orientation would relate to high levels of life satisfaction in the school, friend, and living environment domains was partially supported. Having a positive European-Canadian orientation significantly predicted satisfaction in the living environment and demonstrated a trend in predicting school satisfaction. It did not, however, predict satisfaction with friends. These three domains are part of the public sphere and therefore these results suggest that having a European-Canadian orientation is related to satisfaction in the public sphere. Third, the hypothesis that a strong ethnic identity would relate to high levels of life satisfaction in the family domain was not supported. Fourth, the hypothesis that high levels of both Arabic and European-Canadian acculturation orientation would relate to high levels of life satisfaction in the self domain was partially supported. The results suggest that having a positive Arab orientation relates to satisfaction with the self, but having a positive European-Canadian orientation does not.

However, with reference to Arab youth sociocultural adjustment, having a positive attitude toward European-Canadian culture significantly predicted fewer invalid school absences. Arab ethnic identity approached significance in predicting school adjustment where individuals who had a stronger ethnic identity had better school adjustment. These results partially support the fifth hypothesis that high levels of European-Canadian acculturation orientation would relate to high levels of sociocultural adjustment as measured by school adjustment and invalid school absences.

*Research Question #2: Do friend and family support mediate the relation between acculturation and life satisfaction?*

Given Abu-Laban and Abu-Laban's (1999b) interpretation of private and public life spheres, the mean value of life satisfaction in the friend, school, and living environment domains was generated to form the variable for public life satisfaction. It was decided to keep friend satisfaction as part of the public sphere because most of the participants had at least one European-Canadian friend and because one goal of the current study was to assess the role of friend support. Private life satisfaction was assessed using the mean score for family satisfaction.

To determine whether family support mediated the relation between Arab culture orientation and life satisfaction in the private domains, the following variables were used: Arab acculturation orientation (independent variable), private life satisfaction (dependent variable), and perceived social support from family (mediating variable). To determine whether friend support mediated the relation between European-Canadian culture orientation and life satisfaction in the public domains, the following variables were used: European-Canadian acculturation orientation (independent variable), public life



satisfaction (dependent variable), and perceived social support from friends (mediating variable).

To address each hypothesis, a series of three multiple linear regressions were conducted followed by a Sobel test (Preacher & Hayes, 2004). The first regression analysis assessed the relation between the acculturation orientation variable and the life satisfaction variable. The second regression analysis assessed the relation between the acculturation orientation variable and the social support variable. The third, and final, regression analysis entered the life satisfaction variable as the criterion variable and the acculturation orientation and the social support variables as predictor variables. If a mediation effect existed, this final regression analysis would demonstrate a significant relation between the social support variable and the life satisfaction variable, while decreasing or negating the significant relation between the acculturation orientation variable and the life satisfaction variable previously found in the first regression analysis. The Sobel test evaluates the significance of the indirect effect of the acculturation orientation variable on the life satisfaction variable (Preacher & Hayes).

*Family support as a mediator.* To assess whether family support mediated the relation between Arab culture orientation and life satisfaction in the private domains, a hierarchical multiple regression analysis was conducted with private life satisfaction as the criterion variable (see Table 9). Number of Arab friends was significantly correlated with private life satisfaction and was therefore entered in block 1 (see Table 5). Arab acculturation orientation was entered in block 2.

The regression model was significant ( $F(2, 95) = 10.88, p < .01$ ), and accounted for 18.6% of the variance in private life satisfaction (See Table 9). Positive Arab

Table 9

*Summary of Hierarchical Regression Analyses for Arab Acculturation Orientation*

*Predicting Private Life Satisfaction (N = 99)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.05*	
#ArabFr	.15	.07	.22*		
Step 2				.19**	.14**
AI_Arab	.30	.07	.42**		

*Note.* #ArabFr = number of Arab friends; AI\_Arab = Arab Acculturation Orientation.

\* $p < .05$ . \*\* $p < .01$ .

acculturation orientation significantly predicted greater private life satisfaction, after controlling for number of Arab friends,  $F_{change}(1, 95) = 16.02, p < .01$ . As expected, an analysis of the standardized beta weights indicated that positive Arab acculturation orientation significantly predicted greater private life satisfaction,  $\beta = .42, t(2, 95) = 4.00, p < .01$ .

The criterion variable for the second hierarchical regression was perceived social support from family, as presented in Table 10. Number of Arab friends was significantly correlated with perceived social support from family and was therefore entered in block 1 (see Table 4). Arab acculturation orientation was entered in block 2.

The regression model was significant ( $F(2, 95) = 9.39, p < .01$ ), and accounted for 16.5% of the variance in perceived social support from family (See Table 10). Positive Arab acculturation orientation significantly predicted greater perceived social support from family, after controlling for number of Arab friends,  $F_{change}(1, 95) = 12.91, p < .01$ . An analysis of the standardized beta weights indicated that positive Arab acculturation orientation significantly predicted greater perceived social support from family ( $\beta = .38, t(2, 95) = 3.59, p < .01$ ).

The criterion variable for the third hierarchical regression was private life satisfaction, as presented in Table 11. Number of Arab friends was significantly correlated with private life satisfaction and perceived social support from family and was therefore entered in block 1 (see Tables 4 and 5). Arab acculturation orientation and perceived family support were entered in block 2.

Table 10

*Summary of Hierarchical Regression Analyses for Arab Acculturation Orientation*

*Predicting Perceived Family Support (N = 99)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.05*	
#ArabFr	.20	.09	.23*		
Step 2				.17**	.11**
AI_Arab	.35	.10	.38**		

*Note.* #ArabFr = number of Arab friends; AI\_Arab = Arab Acculturation Orientation.

\* $p < .05$ . \*\* $p < .01$ .

Table 11

*Summary of Hierarchical Regression Analyses for Arab Acculturation Orientation and Perceived Family Support Predicting Private Life Satisfaction (N = 99)*

Variable	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1				.05*	
#ArabFr	.15	.07	.22*		
Step 2				.69**	.64**
AI_Arab	.09	.05	.12		
PSS-Fa	.60	.05	.78**		

*Note.* #ArabFr = number of Arab friends; AI\_Arab = Arab Acculturation Orientation;

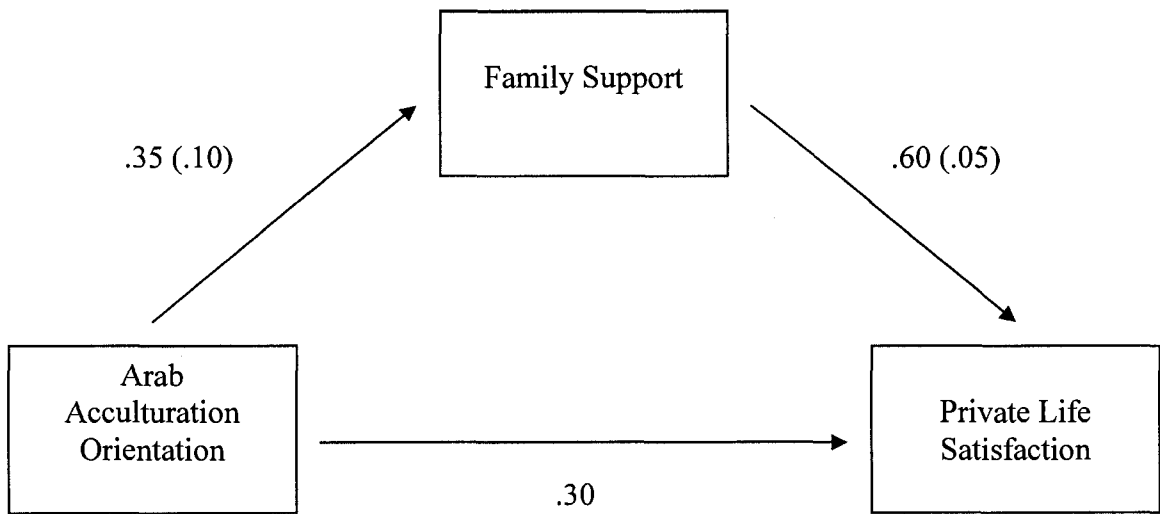
PSS-Fa = Perceived Social Support from Family.

\* $p < .05$ . \*\* $p < .01$ .

The regression model was significant ( $F(3, 94) = 69.24, p < .01$ ), and accounted for 68.8% of the variance in private life satisfaction (see Table 11). Positive Arab orientation and greater perceived social support from family significantly predicted greater private life satisfaction, after controlling for number of Arab friends,  $F_{change}(2, 94) = 96.45, p < .01$ . An analysis of the standardized beta weights indicated that Arab acculturation orientation did not significantly predict greater private life satisfaction,  $\beta = .12, t(3, 94) = 1.78, p = .08$ , but greater perceived social support from family did,  $\beta = .78, t(3, 94) = 12.31, p < .01$ . The inclusion of both Arab acculturation orientation and perceived family social support significantly reduced to non-significance the effect of Arab acculturation orientation on private life satisfaction.

To confirm that family support completely mediated the relation between Arab acculturation orientation and private life satisfaction, a Sobel test was conducted and was significant, Sobel = 3.36,  $p < .01$ . See Figure 4 for a visual description of the significant mediation model.

*Friend support as a mediator.* To assess whether friend support mediated the relation between European-Canadian culture orientation and life satisfaction in the public domains, a hierarchical multiple regression analysis was conducted with public life satisfaction as the criterion variable (see Table 12). Number of European-Canadian friends, English proficiency, perceived parental controlling behaviour, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture were significantly correlated with public life satisfaction and were therefore entered in block 1. European-Canadian acculturation orientation was entered in block 2.



*Figure 4.* Mediation model, showing unstandardized path coefficients. Standard error of the path coefficient is indicated in parentheses.

Table 12

*Summary of Hierarchical Regression Analyses for European-Canadian Acculturation Orientation Predicting Public Life Satisfaction (N = 99)*

Variable	B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1				.16**	
#EuroFr	.07	.04	.19		
EngProf	.39	.18	.21*		
PPCB	-.08	.04	-.21*		
PPP	-.01	.07	-.02		
PPO	.07	.07	.11		
Step 2				.20**	.04*
AI_Euro	.10	.04	.23*		

*Note.* #EuroFr = number of European-Canadian friends; EngProf = English proficiency; PPCB = Perceived Parental Controlling Behaviour; PPP = Perceived Parental Preservation of the Arab Culture; PPO = Perceived Parental Openness to the European-Canadian Culture; AI\_Euro = European-Canadian Acculturation Orientation.

\* $p < .05$ . \*\* $p < .01$ .



The regression model was significant ( $F(6, 91) = 3.84, p < .01$ ), and accounted for 20.2% of the variance in public life satisfaction (See Table 12). Positive European-Canadian orientation significantly predicted greater public life satisfaction, after controlling for number of European-Canadian friends, English proficiency, perceived parental controlling behaviour, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture,  $F_{change}(1, 91) = 4.76, p < .05$ . An analysis of the standardized beta weights indicated that positive European-Canadian acculturation orientation significantly predicted greater public life satisfaction,  $\beta = .23, t(6, 91) = 2.18, p < .05$ .

The criterion variable for the second regression was perceived social support from friends, as presented in Table 13. The adolescent's living situation and number of Arab friends significantly correlated with perceived social support from friends and were therefore entered in block 1 (see Table 4). European-Canadian acculturation orientation was entered in block 2.

The regression model was significant,  $F(3, 93) = 4.95, p < .01$  and accounted for 13.8% of the variance in perceived social support from friends. After controlling for living situation and number of Arab friends, European-Canadian acculturation orientation did not significantly predict perceived social support from friends,  $F_{change}(1, 93) = 2.75, p = .10$ . Therefore, no further analyses were conducted.

*Research question 2: Summary of results.* The data support the hypothesis that stated that family support would mediate the relation between Arab acculturation orientation and life satisfaction in the private domain, as measured by family satisfaction. That is, Arab culture orientation directly predicted the amount of social support received

Table 13

*Summary of Hierarchical Regression Analyses for European-Canadian Acculturation Orientation Predicting Perceived Friend Social Support (N = 99)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.11**	
Living Situation	.28	.12	.23*		
#ArabFr	.12	.05	.24*		
Step 2				.14**	.03
AI_Euro	.08	.05	.16		

*Note.* #ArabFr = number of Arab friends; AI\_Arab = Arab Acculturation Orientation.

\* $p < .05$ . \*\* $p < .01$ .

from family members, which in turn predicted their degree of life satisfaction in private domains. European-Canadian culture orientation did not predict the amount of social support received from friends. Therefore, the data did not support the hypothesis that stated that friend support would mediate the relation between European-Canadian acculturation orientation and life satisfaction in the public domain, as measured by friend, school, and living environment satisfaction.

*Research Question #3: Do friend and family support moderate the relation between acculturation and life satisfaction?*

To test whether perceived family and friend support moderated the relations between global life satisfaction and European-Canadian and Arab culture orientation, respectively, two linear regression analyses were conducted with global life satisfaction as the criterion variables (see Tables 14 and 15). Number of European-Canadian friends, perceived parental controlling behaviour, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture were significantly correlated with global life satisfaction and were therefore entered in block 1 for both regressions (see Table 5). To measure the moderating role of social support from family, the centred values of European-Canadian acculturation orientation and perceived social support from family, as well as the interaction variable between European-Canadian acculturation orientation and perceived family social support were entered in block 2. To obtain the centred values, the overall mean score was subtracted from each participant's score. This resulted in means of zero for European-Canadian and Arab acculturation orientations and for perceived social support from family and from friends. The centred values were obtained because this reduced the effects of multicollinearity

Table 14

*Summary of Hierarchical Regression Analysis for the Moderating Role of Family Support (N = 99)*

Variable	B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1				.11*	
#EuroFr	.05	.03	.15		
PPCB	-.06	.04	-.17		
PPP	-.02	.07	-.03		
PPO	.09	.07	.15		
Step 2				.39**	.28**
C_AI_Euro	.06	.04	.17		
C_PSS-Fa	.23	.04	.53**		
C_AI_EuroXC_PSS-Fa	.03	.03	.10		

*Note.* #EuroFr = number of European-Canadian friends; PPCB = Perceived Parental Controlling Behaviour; PPP = Perceived Parental Preservation of the Arab Culture; PPO = Perceived Parental Openness to the European-Canadian Behaviour; C\_AI\_Euro = the centred value of European-Canadian Acculturation Orientation; C\_PSS-Fa = the centred value of Perceived Social Support from Family; C\_AI\_EuroXC\_PSS-Fa = the interaction variable between the centred value of European-Canadian Acculturation Orientation and the centred value of Perceived Social Support from Family.

\* $p < .05$ . \*\* $p < .01$ .

Table 15

*Summary of Hierarchical Regression Analysis for the Moderating Role of Friend Support*  
(*N* = 99)

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
Step 1				.11*	
#EuroFr	.05	.03	.15		
PPCB	-.06	.04	-.17		
PPP	-.02	.07	-.03		
PPO	.09	.07	.15		
Step 2				.46**	.34**
C_AI_Arab	.11	.04	.29**		
C_PSS-Fr	.35	.06	.48**		
C_AI_ArabXPSS-Fr	.05	.09	.05		

*Note.* #EuroFr = number of European-Canadian friends; PPCB = Perceived Parental Controlling Behaviour; PPP = Perceived Parental Preservation of the Arab Culture; PPO = Perceived Parental Openness to the European-Canadian Culture; C\_AI\_Arab = the centred value of Arab Acculturation Orientation; C\_PSS-Fr = the centred value of perceived social support from friends; C\_AI\_ArabXPSS-Fr = the interaction variable between the centred value of Arab Acculturation Orientation and the centred value of Perceived Social Support from Friends.

\**p* < .05. \*\**p* < .01.

(Tabachnick & Fidell, 2007). The interaction variable, or moderating variable, for social support from family, was computed by multiplying the centred values of European-Canadian acculturation orientation with the centred values of perceived family social support.

To measure the moderating role of social support from friends, the centred values of Arab acculturation orientation, perceived social support from friends, and the interaction variable between Arab acculturation orientation and perceived friend social support were entered in block 2. The interaction variable, or moderating variable, for social support from friends, was computed by multiplying the centred values of Arab acculturation orientation with the centred values of perceived social support from friends.

*Family support as a moderator.* The first regression model examining the moderating role of social support from family was significant ( $F(7, 90) = 8.30, p < .01$ ), and accounted for 39.2% of the variance in family life satisfaction (See Table 14). The combination of European-Canadian acculturation orientation, perceived social support from family, and the interaction variable between European-Canadian acculturation orientation and perceived social support from family, significantly predicted global life satisfaction after controlling for number of European-Canadian friends, perceived parental controlling behaviour, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture,  $F_{change}(3, 90) = 13.79, p < .01$ . An analysis of the standardized beta weights indicated that greater perceived social support from family significantly predicted greater global life satisfaction,  $\beta = .53, t(7, 90) = 6.13, p < .01$ . European-Canadian acculturation orientation and the moderating variable did not predict global life satisfaction ( $\beta = .17, t(7, 90) = 1.67, p = .10$ ;  $\beta = .10,$

$t(7, 90) = 1.07, p = .29$ , respectively) and therefore did not support the hypothesis that family support moderates the relation between European-Canadian acculturation orientation and global life satisfaction.

*Friend support as a moderator.* The second regression model examining the moderating role of social support from friends was significant ( $F(7, 90) = 10.79, p < .01$ ), and accounted for 45.6% of the variance in family life satisfaction (See Table 15). The combination of Arab acculturation orientation, perceived social support from friends, and the interaction variable between Arab acculturation orientation and perceived social support from friends, significantly predicted global life satisfaction after controlling for number of European-Canadian friends, perceived parental controlling behaviour, perceived parental preservation of the Arab culture, and perceived parental openness to the European-Canadian culture,  $F_{change}(3, 90) = 18.94, p < .01$ . An analysis of the standardized beta weights indicated that positive Arab culture orientation and greater perceived social support from friends significantly predicted greater global life satisfaction,  $\beta = .29, t(7, 90) = 3.29, p < .01$  and  $\beta = .48, t(7, 90) = 5.93, p < .01$ , respectively. The moderating variable did not predict global life satisfaction ( $\beta = .05, t(7, 90) = .61, p = .54$ ) and therefore did not support the hypothesis that friend support moderates the relation between Arab acculturation orientation and global life satisfaction.

*Research question 3: Summary of results.* The current results do not support the hypotheses for the third research question. The data do not show a buffering role of friend or family support on the relations between acculturation orientation and life satisfaction. Parental and friend support did however independently predict global life satisfaction. Arab culture orientation also predicted global life satisfaction.

*Research question #4: What gender differences are present in the acculturation process as measured by ethnic identity, and social support strategies as measured by peer ethnicity?*

To assess whether males had stronger ethnic identities and a greater number of Arab friends compared to females, two one-way ANOVAS were conducted. Results indicated that males ( $M = 5.28$ ,  $SD = .58$ ) reported stronger ethnic identities than females ( $M = 4.84$ ,  $SD = .87$ ),  $F(1,97) = 5.44$ ,  $p < .05$ . Males and females, however, did not differ in the number of Arab friends they had,  $F(1,97) = .89$ ,  $p = .35$  (males:  $M = 4.32$ ,  $SD = .85$ ; females:  $M = 4.08$ ,  $SD = 1.17$ ).

*Research question 4: Summary of results.* The data support the first hypothesis that stated that males, compared to females, would have stronger ethnic identities, but does not support the second hypothesis that stated that males, compared to females, would associate with more Arab peers.

#### *Additional Analyses*

*Acculturation orientations.* Four one-way ANCOVAs were conducted to better understand the relations between the four acculturation orientations (i.e., integration, separation, assimilation, and marginalization) and psychological and sociocultural adjustment among Arab youth living in Canada. Given that the regression analyses with family satisfaction, school satisfaction, and invalid school absences as criterion variables demonstrated positive results, it was decided to only run these one-way ANCOVAs. Using these variables as dependent variables in three one-way ANCOVAs allows for the evaluation of psychological adjustment in a private domain and in a public domain and



for the evaluation of sociocultural adjustment. The fourth one-way ANCOVA evaluated group differences in global life satisfaction.

Following the procedure by Ward and Kennedy (1994), each participant was labelled as demonstrating an integration ( $n = 25$ ; 5 males and 20 females), separation ( $n = 30$ ; 10 males and 20 females), assimilation ( $n = 24$ ; 2 males and 22 females), or marginalization ( $n = 19$ ; 8 males and 11 females) orientation based on a median split of the data. That is, participants who had scores above the mean on the Arab acculturation orientation scale ( $M = 5.00$ ) and on the European-Canadian acculturation orientation scale ( $M = 4.35$ ) were categorized as having an integration orientation. Participants who had scores above the mean on the Arab acculturation orientation scale but below the mean on the European-Canadian acculturation orientation scale were categorized as having a separation orientation. Participants who had scores below the mean on the Arab acculturation orientation scale but above the mean on the European-Canadian acculturation orientation scale were categorized as having an assimilation orientation. Participants who had scores below the mean on both scales were categorized as having a marginalization orientation. See Table 16 for means and standard deviations on adjustment variables for each acculturation orientation.

The first one-way ANCOVA assessed differences in family satisfaction among the participants with different acculturation orientations. Number of Arab friends was entered as a covariate since it significantly correlated with family satisfaction (see Table 5). After adjustment of the number of Arab friends, family satisfaction varied significantly with acculturation orientations,  $F(3, 93) = 3.59, p < .05$ . The strength of the

Table 16

*Means and Standard Deviations of Life Satisfaction Scores by Acculturation Orientation*

	Integration		Separation		Assimilation		Marginalization		
	<i>n</i> = 25		<i>n</i> = 30		<i>n</i> = 24		<i>n</i> = 19		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Life Satisfaction</b>									
Global	3.29 <sup>b</sup>	.41	3.19 <sup>b</sup>	.36	3.13	.36	2.91 <sup>a</sup>	.42	
Family	3.19 <sup>a</sup>	.73	3.14	.69	2.55 <sup>b</sup>	.67	2.74	.65	
School	3.20	.51	2.94	.67	3.31	.53	2.88	.66	
<b>School Adjustment</b>									
Absences	2.56	.96	2.73	1.11	2.38	1.28	3.26	1.10	

*Note.* <sup>a</sup> significantly differs from <sup>b</sup>.

relationship between acculturation orientation and family satisfaction was weak, however, with  $\eta^2 = .10$ . Using the Bonferroni correction as a post hoc to adjust for familywise error, group comparisons were examined. Participants who demonstrated an assimilation orientation had significantly poorer family satisfaction than participants who demonstrated an integration orientation ( $p < .05$ ) and approached significance in demonstrating poorer family satisfaction than individuals who demonstrated a separation orientation ( $p = .06$ ).

The second one-way ANCOVA assessed differences in school satisfaction among the participants who endorsed different acculturation orientations. Number of European-Canadian friends was entered as a covariate since it significantly correlated with school satisfaction (see Table 5). After adjustment of the number of European-Canadian friends, school satisfaction did not vary significantly with acculturation orientations,  $F(3, 93) = 2.00, p = .12$ .

The third one-way ANCOVA assessed differences in invalid school absences among the participants who endorsed different acculturation orientations. Age and French proficiency were entered as covariates since they significantly correlated with invalid school absences (see Table 5). After adjustment for age and French proficiency, group differences in invalid school absences approached significance,  $F(3, 92) = 2.48, p = .07$ , and the strength of the relationship between acculturation orientation and invalid school absences was weak, with  $\eta^2 = .08$ . No significant differences appeared after the Bonferroni correction; however, the data demonstrate a trend suggesting that participants with a marginalization orientation had a greater number of invalid school absences than participants who had an assimilation orientation ( $p = .06$ ).

The fourth one-way ANCOVA assessed differences in global life satisfaction among the participants who endorsed different acculturation orientations. Number of European-Canadian friends, parental controlling behaviours, parental openness to the European-Canadian culture, and parental preservation of the Arab culture were entered as covariates since they significantly correlated with global life satisfaction (see Table 5). After adjustment of the covariates, global life satisfaction varied significantly with acculturation orientations,  $F(3, 90) = 4.48, p < .01$ . The strength of the relation between acculturation orientation and global life satisfaction was weak, however, with  $\eta^2 = .13$ . Using the Bonferroni correction as a post hoc to adjust for familywise error, group comparisons were examined. Participants with a marginalization orientation had significantly poorer global life satisfaction than participants with an integration ( $p < .05$ ) or separation orientation ( $p < .05$ ).

*Peer relationships.* A paired sample t-test indicated that the participants associated with more Arab peers than European-Canadian peers,  $t(98) = 3.25, p < .01$ . Of the 99 participants, 12 indicated that they did not have any European-Canadian friends and 6 of these 12 also indicated that they did not have any friends of other ethnicities and therefore either only associated with other Arab youth or did not have any friends. Also, correlation analyses revealed that the number of European-Canadian friends was positively correlated with global life ( $r = .21, p < .05$ ) and school satisfaction ( $r = .22, p < .05$ ) whereas the number of Arab friends was positively correlated with family satisfaction ( $r = .22, p < .05$ ).

*Media.* Participants were asked which media sources they used to follow international news stories. In the current sample, 16 (16.16%) participants did not follow

international news stories, 29 (29.29%) used only Western media sources, 12 (12.12%) used only Arab sources, 5 (5.05%) only used other sources such as the internet, 26 (26.26%) used both Arab and Western, 3 (3.03%) used Western and other sources such as the internet, 2 (2.02%) used Arab and other sources, and 6 (6.06%) used all three sources. In the current study, participants were asked their perception of the accuracy of Western media coverage from (1) “not at all accurate” to (7) “extremely accurate.” The majority of participants ( $n = 69$ , 70.4%) indicated responses on the lower end (1 or 2) of the scale showing that they did not think Western media was accurate.

*Religion.* To assess whether religious background related to Arab ethnic identity and acculturation orientations, one-way ANOVAs were performed on religious identification (Muslim or Christian). Differences in Arab ethnic identity between Christians ( $M = 4.83$ ,  $SD = .80$ ) and Muslims ( $M = 5.05$ ,  $SD = .78$ ) approached significance,  $F(2, 92) = 2.88$ ,  $p = .06$ , as did differences in acculturation orientation between Christians ( $M = -.16$ ,  $SD = 1.11$ ) and Muslims ( $M = .12$ ,  $SD = .94$ ),  $F(2, 91) = 2.94$ ,  $p = .06$ . Differences in European-Canadian orientation (Christians:  $M = .25$ ,  $SD = 1.02$ ; Muslims:  $M = -.06$ ,  $SD = 1.11$ ) were not significant,  $F(2, 91) = .64$ ,  $p = .53$ .

## CHAPTER 4

### DISCUSSION

#### *Adjustment among Arab Youth in Canada*

##### *Psychological Adjustment*

A primary goal of this research project was to assess the relations between acculturation orientations, including ethnic identity, and satisfaction in the various life domains. It was hypothesized first, that maintaining a positive Arab culture orientation would predict greater satisfaction in the private domain of the family, and second, that maintaining a positive European-Canadian culture orientation would predict greater satisfaction in the public domains of school, friends, and living environment. These hypotheses were generally supported. The hypothesis that having a strong ethnic identity would predict greater family satisfaction was not supported and the hypothesis that maintaining strong positive Arab and European-Canadian acculturation orientations would predict satisfaction with the self was only partially supported.

*Life satisfaction in the private domain.* The private sphere includes one's immediate and extended family as well as Arab communities (Abu-Laban & Abu-Laban, 1999b). The results of this study show that having a positive orientation toward one's Arab culture is related significantly to greater family satisfaction. Further analyses also indicated that youth with an integration or separation orientation demonstrated greater family satisfaction than youth with an assimilation orientation. Faragallah and colleagues (1997) had similar findings. Their results indicated that among Arab immigrants, greater assimilation into American society was related to poorer family satisfaction.

Among immigrant families, parents often encourage their children to behave and hold values consistent with their heritage culture (Abu-Laban, 1980; Berry et al., 2006). If large discrepancies in acculturation orientations exist between parents and children, family conflict may arise that could lead to reductions in family satisfaction (Al-Issa, 2000; Santisteban & Mitrani, 2003). Among Arab families, this pressure to maintain heritage cultural values similar to one's parents may be stronger than in many other cultures because, among Arabs, hierarchy and interdependence are greatly emphasized (Henry et al., 2008). Therefore, if parents insist that their children behave in a manner consistent with Arab values, and the children cooperate, they are likely to maintain positive relationships. If the children desire to assimilate into the European-Canadian culture, this act may be interpreted as disrespectful toward the parents and therefore family conflict and reduced family satisfaction is likely to occur.

*Life satisfaction in the public domain.* The public sphere includes the school setting, peers, and non-Arab communities (Abu-Laban & Abu-Laban, 1999b). The results of the present study show that having a positive European-Canadian orientation predicts satisfaction with one's living environment and at school. Research examining sociocultural adjustment demonstrates similar findings. Searle and Ward (1990) and Ward and Kennedy (1999) argue that the greater the cultural distance between societies, the greater difficulty an immigrant will have adjusting to the host society. For example, if a Muslim woman moved to Canada, the acculturation process may be more difficult and stressful than for a woman who moved to Canada from a Christian based society because of the degree of differences in value-systems, dress-code, and beliefs. Research by Berry and colleagues (2006) shows that psychological adjustment is dependent on sociocultural

adjustment. Therefore, developing European-Canadian skills and in turn, endorsing an integration orientation would likely reduce the stress involved in the acculturation process and foster positive psychological adjustment. The current study shows that if youth of Arab descent living in Canada display a positive attitude toward European-Canadian culture, they are likely to have greater satisfaction in the public areas, such as at school, where this orientation is the norm. These results suggest that cultural differences between societies and one's ability to adopt host culture competencies can not only affect sociocultural adjustment, but can also affect psychological adjustment in the public sphere.

It was hypothesized that having a positive mainstream orientation would predict satisfaction with one's friends as this can be conceptualized as a public domain. However, neither Arab nor European-Canadian acculturation orientations predicted satisfaction with friends. Since the participants in this study had more Arab friends than European-Canadian friends, it is unclear whether satisfaction with friends should be included in the private or public sphere. It is likely that this area is a combination of the two. This is consistent with Abu-Laban and Abu-Laban's (1999b) argument that there is considerable overlap between the private and public domains when considering peer relationships. They suggest that this overlap is a result of Arab youth frequently associating with like-ethnic peers and considering family members to be friends. This overlap likely contributes to the lack of significant relations between a single acculturation orientation and friend satisfaction.

*Ethnic identity.* Although an Arab acculturation orientation significantly predicted family satisfaction and Arab ethnic identity was significantly correlated with family



satisfaction, the hypothesis that one's Arab ethnic identity would also predict family satisfaction was not supported after controlling for the number of Arab friends the participants indicated they had. As discussed previously, these friends may include siblings or other relatives. Therefore, if this variable includes relatives, the number of Arab friends is likely to account for a large portion of the variance in family satisfaction, leaving little available variance for ethnic identity, which may explain the non-significant result.

The results of the current study are contrary to what has been demonstrated by the majority of ethnic identity research (e.g., Abu-Rayya, 2006; Berry et al., 2006; Ward & Kennedy, 1994). In general, it has been argued that maintaining a strong ethnic identity is related to high levels of positive adjustment (Abu-Rayya, 2006; Berry et al., 2006; Ward & Kennedy, 1994). For the purpose of the present study, participants of all Arab lineages and of all religious faiths were recruited to better understand ethnic identity and adjustment among Arab youth in general. This broad definition was used since it has been argued that similar cultural traditions, myths, folklore, music, foods, and customs are pervasive throughout the Arab culture, and these similarities considerably outweigh the differences between Arab subcultures (Abu-Laban, 1999). However, given this broad definition, the measurement of ethnic identity may not have identified the identity of each participant that relates to his or her adjustment. For example, if a participant identifies more with her religious identity than her Arab identity, measuring this identity construct may reveal a stronger relation between identity and adjustment. Or, if a youth identifies more with his racial identity than his Arab identity, it is possible that this identity might relate more to his adjustment.

Given the many countries of origin and the different religious faiths participants ascribed to, the meaning of Arab identity is also likely to differ between participants. After completing the questionnaires, one participant emailed the principal investigator and stated that she behaves and dresses in a certain manner because she practices Islam and not because she is of Arab descent. This suggests that the measurement of ethnic identity, which included questions about dress and behaviour, may, for some participants, relate more to their religious identity than their Arab identity. Since religious background may affect the actual or reported strength of Arab youth identity, comparisons between religious groups were made on the ethnic identity and acculturation orientation measures. Results did not reveal significant differences between groups, but approached significance on the ethnic identity and Arab acculturation orientation measures. Muslim youth had slightly stronger ethnic identities and higher Arab orientations. It therefore remains unclear whether the Arab ethnic identity construct was measured separately from Muslim identity or whether Muslim youth have stronger identities than Christian youth.

It is also possible that identifying in multiple ways demonstrates greater relations to adjustment than identifying simply as Arab. According to Goffman (1959), people look to their social surroundings to monitor their behaviour. Also, according to the situated identity theory (Alexander & Beggs, 1986; Alexander & Rudd, 1984; Alexander & Wiley, 1981), people will seek positive feedback from their social surrounding to achieve a positive self-image. Since the media are central in disseminating cultural values and norms (Barnett & MacPhail, 1980), and North American media have a history of reporting biased stories against Arabs (Abu-Laban & Abu-Laban, 1999b), it is likely that the youth of this culture are having difficulty obtaining adequate positive feedback from

mainstream media. In fact, in the current study, participants did not perceive Western media as accurate. Given this perception, Arab youth in Canada may not be obtaining support from society to identify as Arab. As such, their identities are likely to be compromised which may result in personal confusion. Although racism and compromised identities were not addressed in the current study, these factors may contribute to the non-significant relation between a strong ethnic identity and positive adjustment.

Threats and violence against Arabs in North America increased after the Arab-Israeli war in 1967 (Abu-Laban & Suleiman, 1989), during the U.S. bombing of Libya in 1986 (Abraham, 1994), during the Gulf War in the early 1990's (Abu-Laban and Abu-Laban, 1999b; Abraham), after the tragic events of September 11<sup>th</sup> 2001 (American Arab Anti Discrimination Committee, 2001a, 2001b; Hakim-Larson & Nassar-McMillan, 2007), and since the American war in Iraq (Hakim-Larson & Nassar-McMillan). Abu-Laban and Abu-Laban, suggest that events such as these compromise the identities of Arabs because they face increased racism. This may be especially true for Arab youth who are negotiating their affiliations with the two divergent cultures and seeking to solidify an identity (Abu-Laban & Abu-Laban). It is therefore possible that the current war in Iraq and the negative media portrayal of Arabs has affected the way in which Arab youth view their culture and as such, they may be unsure how to interpret and identify as Arab. This identity confusion may compromise the positive effects of having a strong ethnic identity.

Although their identification with Arab culture did not predict life satisfaction, the youth in this study did not demonstrate particularly low levels of life satisfaction as

compared to Huebner's (1994) sample. Witteborn (2007) conducted a qualitative analysis on situation specific Arab identity presentation in the United States. She found that people identified with various titles depending on their audience and the physical setting. She also found that September 11<sup>th</sup> 2001 influenced their identification. For example, participants tended to use the term Arab American when addressing politicians or the media to increase their credibility and Arab or Arab American to contradict terrorist stereotypes by demonstrating their Arab identity with no terrorist affiliation. Individuals from Palestine identified as Palestinian if they wanted to discuss social or political issues of their homeland (Witteborn). After September 11<sup>th</sup> 2001, Arabs experienced an increase in solidarity and encouraged one another to identify as Arab instead of their specific Arab national identities (Witteborn). They also showed increases in identifying as American and Arab American because they felt more accepted when representing themselves in this manner (Witteborn). Having multiple identities may act as a protective factor when one of these identities has been compromised. Similar to situated identity theory (Alexander & Beggs, 1986; Alexander & Rudd, 1984; Alexander & Wiley, 1981), ethnolinguistic identity theory posits that individuals will oscillate between their ethnic language and the majority language depending on the social situation and this fluctuation helps the minority group members maintain a positive view of themselves within the public sphere (Giles, Bourhis, & Taylor, 1977). It is possible that with this population, it is not strong Arab ethnic identity per se that predicts positive adjustment, but flexibility in identification. Further research needs to be conducted to address the possibility that using multiple identities acts as a buffer against discrimination and negative feedback.

*Life satisfaction with the self.* The hypothesis that both Arab and European-Canadian culture orientations would predict satisfaction with the self was partially supported. Only Arab culture orientation approached significance in predicting satisfaction with the self. Previous research by Abu-Rayya (2006) showed that having an integration or assimilation orientation related to higher levels of self-esteem among Arab adolescents in Israel. Barry (2005), however, found that among Arab-American males, demonstrating an integration orientation related to low levels of personal self-esteem. The divergent results within the literature may relate to differences between the populations. The current sample included males and females living in Canada, whereas Abu-Rayya's sample resided in Israel, and Barry's sample included only males living in the United States. The relations between acculturation orientations and satisfaction with oneself may be different depending on host country and gender of the youth. Nonetheless, the results of the current study show that Arab youth living in Canada derive personal satisfaction from behaving and maintaining attitudes consistent with their Arab culture.

#### *Sociocultural Adjustment*

It was hypothesized that having a European-Canadian acculturation orientation would predict sociocultural adjustment. This hypothesis was generally supported as European-Canadian acculturation orientation predicted fewer invalid school absences and approached significance in predicting better school adjustment. Additional analyses also showed that having an assimilation orientation was related to fewer invalid school absences and a marginalization orientation was related to the greatest number of invalid school absences. These results corroborate the work by Ward and Kennedy (1994, 1999) where they argued that having a positive mainstream attitude is linked to positive

sociocultural adjustment. In a study examining acculturation and adjustment among Jewish sojourner youth from Russia living in Israel (Eshel & Rosenthal-Sokolov, 2000), lower levels of separation orientation and higher levels of integration orientation were positively related to sociocultural adjustment, as measured by perceived acceptance by peers and the general Israeli society, and by consultant ratings of school adjustment. Therefore, the results of the current study and previous research suggest that integrating a European-Canadian culture orientation into one's acculturation orientation, regardless of one's Arab orientation, is likely to benefit school success among Arab-Canadian youth.

#### *Summary of Psychological and Sociocultural Adjustment*

Overall, the results show that having a positive European-Canadian orientation predicts satisfaction in public domains and having a positive Arab orientation predicts satisfaction in private domains. Having a positive European-Canadian acculturation orientation also predicts adaptive sociocultural adjustment. These results suggest that people's ability to conform to social norms and expectations help in generating greater satisfaction and success within the various domains and therefore youth may be driven to conform to social norms specific to each domain. These results are consistent with previous research (e.g., Berry et al., 2006; Ward & Kennedy, 1994). Specifically, Arends-Tóth and van de Vijver (2003) found that Turkish adults living in the Netherlands displayed an integration orientation in public while demonstrating a separation orientation in private. The current results are also consistent with situated identity (Alexander & Beggs, 1986; Alexander & Rudd, 1984; Alexander & Wiley, 1981) and ethnolinguistic identity (Giles, Bourhis, & Taylor, 1977) theories that postulate that

individuals will seek positive feedback from their surroundings, sometimes by conforming to social demands or expectations.

Previous research differentiated between sociocultural and psychological adjustment and argued that immigrants demonstrate better psychological adjustment if they maintain a positive attitude toward their heritage culture and better sociocultural adjustment if they maintain a positive attitude toward the host culture (e.g., Berry et al., 2006; Ward & Kennedy, 1994). The current research study has corroborated these results but has added an extra dimension to psychological adjustment. That is, the results of the present study show that having a positive Arab acculturation orientation predicts psychological adaptation in private domains and having a positive European-Canadian acculturation orientation predicts psychological adaptation in public domains.

#### *Social Support as a Mediator*

The second set of hypotheses addressed the possible mediating role of family and friend support on the relations between Arab culture orientation and life satisfaction in the private domain, and European-Canadian culture orientation and life satisfaction in the public domain, respectively. Whereas family support mediated the relation between Arab culture orientation and life satisfaction in the private domain, friend support did not mediate the relations between European-Canadian culture orientation and life satisfaction in the public domain. That is, Arab culture orientation directly predicted the amount of social support received from family members, which in turn predicted their degree of life satisfaction in private domains. European-Canadian culture orientation did not predict the amount of social support received from friends. These results corroborate the findings by Oppedal and colleagues (2004). With a sample of diverse immigrants junior high school

students in Norway, they showed that family support mediated the relation between ethnic culture competence and ill mental health whereas friend support did not mediate the relation between host culture competence and ill mental health.

The current results indicate that family support plays a crucial role in interpreting the relation between acculturation and adjustment. That is, having a positive Arab acculturation orientation is related to greater perceived family support, which in turn is related to positive private life satisfaction. Family relationships are central in the formation of one's Arab identity (Abu-Laban & Abu-Laban, 1999a), and family members are the main source of social support for Arab youth (Abudabbeh, 1996). Therefore, it is not surprising that family bonds and support appear to have a great influence on adjustment.

A European-Canadian culture orientation did not predict the degree of perceived social support received from friends. Although peers tend to encourage the exploration of the dominant culture (Oppedal et al., 2004), this pressure is likely not as strong for the current sample for several reasons. With the exception of one participant, all youth in this study were first or second generation Canadians, suggesting that they may not have generated a huge desire to adopt European-Canadian values and norms since they are not far removed from their Arab heritage. Participants in the current study were also less likely to seek out and associate with mixed-ethnic peers, which may explain the non-significant relation between European-Canadian acculturation orientation and friend support. Although it can be expected that Arab youth will be inclined to associate with other Arab youth (Abu-Laban & Abu-Laban, 1999b), the increased solidarity that Arabs have experienced since September 11<sup>th</sup> 2001 (Witteborn, 2007), may further generate this



desire to associate with like-ethnic peers. Canada, an ethnically diverse society and supportive of the maintenance of one's heritage (Berry et al., 2006), provides opportunities for Arab youth to befriend other Arab youth and allows for this ethnic retention. Given this interpretation, the social support received from friends is likely support received from other Arab youth, which may have reduced the pressure to adopt behaviours and values consistent with European-Canadian culture.

Overall, these results indicate that among first and second generation Arab youth, perceived support received from family members is of primary importance to their adjustment and one's European-Canadian culture orientation does not predict perceived support received from friends. However, further research is required to gain a better understanding of like-ethnic and mixed-ethnic peer influences.

#### *Social Support as a Moderator*

In the present study, perceived family support did not moderate the relation between European-Canadian culture orientation and global life satisfaction, and perceived friend support did not moderate the relation between Arab culture orientation and global life satisfaction. That is, social support from friends and family did not protect against low life satisfaction when adopting a more negative view toward the Arab or European-Canadian cultures, respectively.

These results contradict the view held by stress theorists that social support acts as a buffer in times of stress (Lazarus & Folkman, 1984), acculturation being the stressful event (Berry, 1990; Ward, 2001). They also differ from Henry and colleagues' (2008) study that examined the relations between parental acculturation, parental controlling behaviours, and well-being among Arab youth living in the United States. They found

that youth who perceived their parents to be open to the host culture felt better and had fewer psychological difficulties. Parental controlling behaviours moderated the relation between perceived parental preservation of the Arab culture and well-being. When parents demonstrated high levels of controlling behaviours of their children, then their attempt to preserve the Arab culture and guide their children to make choices consistent with the Arab culture did not relate to their children's well being. However, if parents were not perceived as controlling, then their motivation to preserve the Arab culture led to greater child well-being. Given Henry and colleagues' findings and the findings in the current study, it remains unclear to what extent parental controlling behaviours have an impact on youth's adjustment and well-being in comparison to parental supportive behaviours.

The results of the current study are, however, consistent with the research conducted by Ben-Ari and Gil (2004). They examined perceived social support and well-being among Arabs and Jews living in Israel. Their results showed that among Palestinians, receiving support from their social networks did not protect them from feelings of distress. They argue that because Arabs tend to rely on informal support networks rather than formal networks, when under stress they may not benefit from the availability of support. Instead, they would benefit from having a single person whom they can trust to go to in times of need. According to Ben-Ari and Pines (2002), this person is likely to be a partner or best friend. It is possible that the assessment of social support with Western-influenced measures does not fully assess the facets of social support that are necessary to moderate the relation between acculturation and adjustment among Arab youth. Therefore, further research into the measurement of this construct is

needed and in turn, research is required to understand whether social support buffers against ill mental health and/or promotes greater life satisfaction among Arab youth.

#### *Gender Differences Among Arab Youth in Canada*

Male participants in this study reported stronger ethnic identities than females. These results are similar to the finding of Abu-Laban and Abu-Laban (1999a). They found that 36% of females and 14% of males identified more with Canadian than with Arab culture, and 86% of males but only 64% of females identified more with Arab culture than Canadian culture. Also, in their survey, more females than males tried to hide their Arab culture.

A study examining young immigrants in Norway (Oppedal et al., 2005) found that females increased in host culture competence from first to second generation whereas males demonstrated more traditional values including increased scores in ethnic culture competence and collectivistic family values. Given that ethnic identity is an aspect of acculturation (Phinney, 2003), the results of the present study are consistent with this finding. However, the current results contradict other research that has shown that males are likely to adopt the values and behaviours of the host culture because they have more freedom (Berry & Sam, 1997; Liebkind, 1996; Sam, 1995).

Ajrouch (1999) argues that gender is a critical factor in the formation of ethnic identity. It is the traditions and behaviours of the females that define what it is to be Arab and males derive their identity from the behaviours of the females within their families (Ajrouch). Males in a family will often control the behaviours of their sisters in order to maintain cultural identity (Ajrouch). Females, as a result, experience more stress and pressure to uphold traditional values (Ajrouch). They may therefore resent their culture

for not allowing them to act in ways similar to their European-Canadian peers and as such, identify less with the Arab culture (Ajrouch).

The current study did not show that males, compared to females, associated with more Arab peers. It has been argued that females enjoy more freedom with non-Arab friends and are therefore more likely to befriend them whereas males can enjoy their freedom with both Arab and non-Arab friends (Abu-Laban & Abu-Laban, 1999b). There are several possible explanations for the current results. First, in recruiting participants, Arab and Muslim student groups and other Arab or Muslim online groups were primarily targeted. It can therefore be assumed that a large number of the participants were members of an Arab or Muslim group. As such, they are all likely to have many Arab friends. Second, there are several factors that may contribute to an increased desire for both genders to associate with like ethnic peers. Because tension and discrimination against Arabs in North America since September 11<sup>th</sup> 2001 have been high (Hakim-Larson & Nassar-McMillan, 2007), Arab youth may feel more comfortable being with people who will not display prejudicial stereotypes. Also, as mentioned by Witteborn (2007), since September 11<sup>th</sup> 2001, there has been an increase in Arab solidarity. It is possible that males and females are now equally motivated to befriend Arab peers to demonstrate this solidarity.

#### *Implications of the Findings*

The results of the current study have important implications for educators and people involved in developing school programs. Youth are more likely to succeed in and enjoy school if they are able to integrate a strong positive European-Canadian orientation into their Arab culture orientation. Youth with a negative European-Canadian orientation

are therefore likely to be at risk for increased school truancy and dissatisfaction. As such, culturally sensitive preventative programs could foster school success among these youth and therefore should be considered when developing school programs.

These results may also inform clinical practice with Arab youth. This study shows that it is important to consider the areas in which the youth are demonstrating the greatest difficulty. Treatment planning should consider the youth's acculturation orientation and attachment to their ethnicity and consider whether this is related to their problems. For example, if the difficulties are only present in the home, then it is possible that gearing the therapy toward the development of greater ethnic pride and participation in cultural activities may help the youth. If the problems are within the community and in public domains, then helping the youth accept the European-Canadian culture and develop European-Canadian specific skills may help.

Also, results from this study emphasize the importance of family support in psychological adjustment. Therefore, emphasis should be placed on family activities when considering possible interventions. Depending on the issue, these interventions can focus on helping the family integrate typically Canadian activities into their lifestyles or they can focus on developing greater connections to their Arab community. Irrespective of the youth's acculturation orientation, a family focussed intervention is most likely to promote positive change. Family involvement in public interventions, such as interventions in schools, should also be considered. Nassar-McMillan and Hakim-Larson (2003) advocated for a multisystem approach to treatment with Arab clients. They emphasized the importance of including most, if not all, family members in the treatment program, regardless of whether they are directly affected by the client's treatment issues.

### *Limitations*

The current study has some limitations that must be addressed. First, the conceptualisation of private and public life domains was based on Abu-Laban and Abu-Laban's work (1999a, 1999b). They discussed the overlap between these domains especially with reference to peer relationships. This overlap is likely present in the current study within the friend support and friend satisfaction constructs. Although participants indicated how many Arab and European-Canadian friends they had, the conceptualisation of friend support and friend satisfaction did not consider the ethnicity of the peers. As such, these variables likely contribute to both the maintenance of the Arab culture and the exploration of the Canadian culture and in turn, adjustment in private and public domains.

The conceptualisation of the variable assessing life satisfaction within one's living environment may also have some overlap between the private and public domains. It was not assessed whether the participants lived in Arab, multiethnic, or predominantly European-Canadian communities. However, it can be assumed that a number of different communities were included in the sample since participants were recruited across Canada. Although it was decided that living environment would be included in the public domain, for some it may have been considered a private domain.

Given Witteborn's (2007) qualitative analysis, the ethnicity of the principal investigator may have influenced the degree to which participants identified as Arab. The purpose of the survey remained vague and therefore the intention of the principal investigator may have been questioned. In fact, on several occasions, group leaders requested clarification of the goal of the current study. Therefore, participants may have

been attempting to portray themselves in a particular way given their interpretation of the intent of the principal investigator. This, in turn, may have affected the results specific to ethnic identity.

The online nature of this study can be viewed as a strength and a limitation. Online research promotes the recruitment of a diverse sample (Gosling et al., 2004). In the current study, participants with heritages in 18 of the 22 Arab countries, with the majority from Lebanon, Palestine, Egypt, Iraq, and Syria, were included in the analyses. Participants also represented both Christian and Muslim faiths with the majority of participants being Christian. This is similar to the demographic breakdown of Arabs living in Canada (Abu-Laban, 1990; Abu-Laban & Abu-Laban, 1999b). However, more females than males were recruited. Although the current sample appears representative of Arab youth in Canada and the questionnaire data seems valid, the results and the interpretations of these results would likely be strengthened if a qualitative component were also included. By asking participants directly how they deal with the different messages they receive from family and from society, we would gain a better understanding of the meaning behind the acculturation process for these youth.

Online research limits control of the recruitment process. Although multiple methods were used to remove duplicate protocols, ineligible participants, and participants who completed the questionnaire without thought, some participants who did not meet the criteria to participate or who completed the survey more than once to enter their name in the draw for the gift certificate might have gone unnoticed. Research that is conducted in person can have similar problems. As discussed previously, Arab youth cannot be

identified based on physical or racial characteristics, or religious faith. Therefore, researchers must trust that participants meet the criteria for participation.

Web-based surveys further involve two potential risks: (1) harm resulting from emotional reactions to questions or experimental manipulations and (2) harm resulting from breach of confidentiality (Kraut et al., 2004). However, Kraut and colleagues argue that online surveys are no more risky than their offline counterparts. They state that these types of surveys may be less risky because participants may find it easier to withdraw if they feel discomfort since these surveys are usually completed alone. Participants in the current study were provided with a “leave the study” link and were therefore able to quit easily if they wanted to. Also, since this study was posted online and the principal investigator did not ask participants directly to complete the online survey, participants were not likely to feel coerced into completing the survey. Therefore, all participation was expected to be voluntary. The only identification information collected were email addresses from individuals who wished to enter their name into the draw; therefore the risk of breaching confidentiality was reduced. This information was kept separate from the data and the principal investigator was the only one who had access to it.

#### *Directions for Future Research*

Future research should focus on further understanding the private and public life domains and what factors affect adjustment in each area. Although this study demonstrates a trend toward greater psychological adjustment in private and public domains when an individual has a positive orientation toward the Arab and European-Canadian cultures, respectively, more research is needed to replicate these findings. It is important to examine friend support from within and outside one’s ethnic group



separately. This may help to increase understanding of adjustment in the private and public domains. Also, when examining well-being within participants communities, it is important to discern like-ethnic and mixed-ethnic living environments. Like-ethnic living environments are included in the private sphere whereas mixed-ethnic living environments are included in the public sphere. Therefore, life satisfaction may be differentially affected by acculturation orientations depending on the type of living environment.

The current study restricted the sample to adolescents 15 to 21 years of age. Future research should examine a wide range of age groups to understand whether similar trends exist. Also, the participants of this study were predominantly first and second generation Canadians of Arab descent. Over time and over many generations, the acculturation process is likely to change and therefore the importance in maintaining one's heritage culture and developing European-Canadian cultural values is also likely to change.

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## Appendices

Appendix A: Example E-Mail to Group Organizers or Administrators

**Are you a Canadian of Arab descent?**

**Is at least one of your parents of Arab descent?**

**....If so, I hope that you will consider participating in my survey....**

I am conducting a study on life satisfaction among **Canadian youth of Arab descent** and hope you'll be willing to help me out by completing the survey and/or by posting a link to my survey on your web-page. My name is Ashley Paterson and I am a graduate student in the Psychology Department at the University of Windsor, Ontario.

Participants must be between the **ages of 15 and 21, live in Canada**, and be of **Arab descent**. The survey uses a secure form. However, if you have any questions or would like me to send you the survey by e-mail or postal mail instead, feel free to contact me via e-mail: [patersoa@uwindsor.ca](mailto:patersoa@uwindsor.ca).

The survey isn't long and is very easy to complete. All participants will have the opportunity to enter a draw to win a \$50.00 gift certificate to Amazon.ca!

You can complete the survey at:

[www.uwindsor.ca/arabcanadian](http://www.uwindsor.ca/arabcanadian)

Thank you! Please help by forwarding this announcement to anyone who might be willing to participate and any Arab Canadian club, listserv, or organization that you are a member of!

Ashley D. Paterson, B.Sc.  
Master's Candidate  
Department of Psychology  
University of Windsor  
[patersoa@uwindsor.ca](mailto:patersoa@uwindsor.ca)





LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

*Please keep this copy for your records*

CANADIAN YOUTH OF ARAB DESCENT

You are asked to participate in a research study conducted by Ashley Paterson, under the direction of Dr. Julie Hakim-Larson, from the Psychology Department at the University of Windsor. The results of this project will contribute to the master's thesis of Ashley Paterson.

If you have any questions or concerns about the research, please feel to contact Ashley Paterson via email at [patersoa@uwindsor.ca](mailto:patersoa@uwindsor.ca) or by phone at (519) 253-3000 ext. 2215, or Dr. Julie Hakim-Larson via email at [hakim@uwindsor.ca](mailto:hakim@uwindsor.ca) or by phone at (519) 253-3000 ext. 2241.

PURPOSE OF THE STUDY

This study is designed to better understand well-being and satisfaction in the various life domains among adolescents of Arab descent living in Canada.

PROCEDURES

If you volunteer to participate in this study, you will be asked to:

- complete a background information questionnaire,
- complete questionnaires relating to your family and friends,
- complete questionnaires relating to your attitudes towards Canadian and Arab cultures, and
- complete questionnaires relating to your well-being and life satisfaction.

This will take you approximately 20-25 minutes. We ask you to complete these questionnaires in a private area.

**Who can participate:**

You are invited to participate if you:

- 1) are of Arab or Middle Eastern descent. That is:
  - a. you were born in or have ancestry from one of the Arab states; and,
  - b. your roots are in the Arabic language and culture; or,
  - c. you identify yourself as Arab or Arab Canadian.

NOTE: You may be of Christian or Muslim faith, or of any other religious faith.

- 2) live in Canada; and

- 3) are between the ages of 15 and 21.

#### POTENTIAL RISKS AND DISCOMFORTS

The questionnaires may remind you of some uncomfortable feelings about your heritage culture or about the Canadian culture. You may leave the study at any time by clicking on the 'Withdraw Data' icon. If you choose to withdraw, you will be directed to a form that describes the purpose of this study and lists services available to Arab youth.

#### POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Completing this study may help you become more aware of yourself and who you identify with. It may allow you to reflect on your life and how satisfied you are with it. The results from this study may help Canadian communities develop more culturally sensitive intervention programs for Arab youth who are having difficulties adjusting to Canadian society.

#### PAYMENT FOR PARTICIPATION

For completion of this study, you may enter your name in a draw for one 50\$ gift certificate to Amazon.ca.

#### CONFIDENTIALITY

Any information that is obtained in connection with this study will remain confidential. Any identifying information will be kept separate from your answers to the questions in this survey. Your name will not appear on any reports of this study. If you choose to enter your contact information into the lottery draw or if you provide your email address to be contacted in future studies, this information will in no way be linked to your survey responses and will be kept in a password protected file. Once the lottery has been drawn the information in connection with the lottery will be destroyed. This information will not be disclosed to any external party.

#### PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to

answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. You may terminate your session at any time by clicking the “Withdraw Data” icon.

#### FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

Upon completion of the study, a summary of the results will be posted on the University of Windsor Website.

Web address: [www.uwindsor.ca/reb](http://www.uwindsor.ca/reb)

Date when results are available: September, 2008

#### SUBSEQUENT USE OF DATA

These data may be used in subsequent studies. These data may be used by the researcher for subsequent publications but will not deviate from the purpose described in this form. The information collected may be used to further examine the experiences of individuals of Arab descent residing in Canada.

#### RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

#### SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

---

Signature of Investigator – Ashley Paterson, October 15, 2007



## CONSENT TO PARTICIPATE IN RESEARCH

*Please sign this form and return it with the questionnaire package.*

### CANADIAN YOUTH OF ARAB DESCENT

You are asked to participate in a research study conducted by Ashley Paterson, under the direction of Dr. Julie Hakim-Larson, from the Psychology Department at the University of Windsor. The results of this project will contribute to the master's thesis of Ashley Paterson.

If you have any questions or concerns about the research, please feel to contact Ashley Paterson via email at [patersoa@uwindsor.ca](mailto:patersoa@uwindsor.ca) or by phone at (519) 253-3000 ext. 2215, or Dr. Julie Hakim-Larson via email at [hakim@uwindsor.ca](mailto:hakim@uwindsor.ca) or by phone at (519) 253-3000 ext. 2241.

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This will take you approximately 20-25 minutes. We ask you to complete these questionnaires in a private area.

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## POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Completing this study may help you become more aware of yourself and who you identify with. It may allow you to reflect on your life and how satisfied you are with it. The results from this study may help Canadian communities develop more culturally sensitive intervention programs for Arab youth who are having difficulties adjusting to Canadian society.

## PAYMENT FOR PARTICIPATION

For completion of this study, you may enter your name in a draw for one 50\$ gift certificate to Amazon.ca.

## CONFIDENTIALITY

Any information that is obtained in connection with this study will remain confidential. Any identifying information will be kept separate from your answers to the questions in this survey. Your name will not appear on any reports of this study. If you choose to enter your contact information into the lottery draw or if you provide your email address to be contacted in future studies, this information will in no way be linked to your survey responses and will be kept in a password protected file. Once the lottery has been drawn the information in connection with the lottery will be destroyed. This information will not be disclosed to any external party.

## PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant

doing so. You may terminate your session at any time by clicking the “Withdraw Data” icon.

#### FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

Upon completion of the study, a summary of the results will be posted on the University of Windsor Website.

Web address: [www.uwindsor.ca/reb](http://www.uwindsor.ca/reb)

Date when results are available: September, 2008

#### SUBSEQUENT USE OF DATA

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#### RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

#### SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE

I understand the information provided for the study Canadian Youth of Arab Descent as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

\_\_\_\_\_  
Name of Subject

\_\_\_\_\_  
Signature of Subject

\_\_\_\_\_  
Date

#### SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date

## Appendix C: Debriefing form

The purpose of this study is to assess the well-being of Canadian youth of Arab descent. Our goal is to understand how the various levels of affiliation with the Canadian and Arab cultures relate to youths well-being at home and amongst their peers. We are also interested in understanding how family and friend support relates to an Arab youth's well-being in Canada.

The results for this study will be posted at the following website:

[www.uwindsor.ca/reb](http://www.uwindsor.ca/reb).

If you have any questions or concerns regarding this survey, please contact me via email at [patersoa@uwindsor.ca](mailto:patersoa@uwindsor.ca).

May a member of this research team contact you for participation in future studies?

Yes, please provide me with your email address: \_\_\_\_\_

No

### **Kids Help Phone**

1-800-668-6868

<http://www.kidshelpphone.ca/>

## VITA AUCTORIS

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