TO BE, OR NOT TO BE “CANADIAN”: THE ROLE OF ACCULTURATION MOTIVATION IN INTERNATIONAL STUDENT ADJUSTMENT AND FUTURE RESIDENCY INTENT

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ABSTRACT

Increasing international student recruitment and post-graduation retention rates represent numerous political, economic, and sociocultural advantages for the host country. For Canada to reap such benefits, international students must first successfully transition to the Canadian environment. Given the challenges involved in cross-cultural transitions, the present study investigated the role of acculturation motivation in the international student experience. Using a mixed-methods design, acculturation motivation was measured in a sample of 266 international students ($M_{age} = 21.92$). A comparative thematic analysis revealed that international students with low acculturation motivation more frequently endorsed themes relating to a negative experience in Canada, whereas the opposite was observed in international students with high acculturation motivation. Following this qualitative exploration, quantitative analyses confirmed the predictive validity of acculturation motivation in both international student adjustment and future residency intentions. This mixed-methods approach not only validates and expands initial qualitative findings, but also supports the role of acculturation motivation in the international student experience.
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To Be, or Not to Be “Canadian”: The Role of Acculturation Motivation in International Student Adjustment and Future Residency Intent

The number of international students studying in Canada is on the rise. According to the Canadian Bureau for International Education (CBIE; 2013), Canadian institutions accepted over 265,000 international students in 2012, a 94% increase from 2001. In addition, the Canadian Department of Foreign Affairs and International Trade (DFAIT) estimated that in 2010, international students generated a total of eight billion dollars and fueled over 86,000 jobs nationwide (Baluja, 2012; Kunin & Associates, 2012). Thus, beyond the benefits of cultural diversity provided by an international student body, the presence of international students also culminates in socio-economic benefits for the host country. Furthermore, retaining international students as future citizens also represents numerous host country advantages. For example, promoting international students’ transition from temporary to permanent residency can alleviate current and projected Canadian labour force shortages, while simultaneously addressing issues of low birth rates and an aging working population (Arthur & Flynn, 201; Lu, Zong, Schissel, 2009; Tremblay, 2005). It has therefore become apparent that the internationalization of education represents both short-term and long-term advantages for the political, economic, and sociocultural structure of the host country.

In response to these wide-ranging benefits, several efforts have been made to increase international student recruitment and retention rates. With regard to international student recruitment, the Government of Canada launched the International Education Strategy in January 2014, an action plan aimed at enhancing Canada’s global position in the higher education market. One of the principal goals of the International Education Strategy is to double the number of international students to over 450,000 by 2022 (Government of Canada, 2014). With
regard to international student retention, Citizenship and Immigration Canada (CIC) has also implemented a number of initiatives. For example, in 2008, CIC introduced the Canadian Experience Class, an immigration option that prioritizes international students’ application for permanent residency over those of other potential immigrants (CIC, 2013).

However, increasing international student attraction and retention rates does not solely rely on host country efforts. Rather, international students themselves are active agents in this process. Regarding the recruitment of prospective students, several studies have demonstrated that positive word-of-mouth from former or current international students is one of the most effective and utilized means of attracting future applicants (Choudaha, Chang, & Kono, 2013; Hanover Research, 2010; Wang, 2009; Wintre, Kandasamy, Chavoshi, & Wright, 2013). Regarding the retention of current students, studies have also demonstrated that international students’ host country adaptation experience can either facilitate or hinder their potential transition from temporary to permanent residency (Baláz, Williams, & Kollár, 2004; Khoo, Hugo, & McDonald, 2008). Thus, unlike other types of migrant groups, international students have the unique opportunity of gaining extensive host country exposure prior to having to decide whether or not they would like to apply for permanent residency (Alberts & Hazen, 2005; Baláz, Williams, & Kollár, 2004). Taking these findings together, it becomes apparent that fostering a positive international student experience would not only address concerns of individual well-being, but also promote the successful attainment of government-related objectives.

Yet, compared to domestic students, international students are known to typically face greater challenges and adversities. Studies that have investigated international students’ transition to university have demonstrated that this process can be susceptible to a number of negative adjustment outcomes, such as culture shock, loneliness, depression, and acculturative
stress (e.g., McKinlay, Pattison, & Gross, 1996; Smith & Kawaja, 2011). Thus, along with the normative stressors involved with developmental stage and student status, international students often have the burden of coming to terms with additional psychological, sociocultural, and language-related stressors (Smith & Kawaja, 2011). Considering these vulnerabilities as well as the objectives outlined in Canada’s International Education Strategy, identifying what variables enhance international students’ ability to transition successfully from home to host country is both timely and of interest.

One potential variable that has been under-investigated in the international student literature is acculturation motivation. Acculturation motivation represents a willingness to learn about the host culture, to develop friendships with host members, and to explore the host country’s social and cultural environments (Chirkov, Safdar, de Guzman, & Playford, 2008; Chirkov, Vansteenkiste, Tao, & Lynch, 2007) Given that international students’ initial migrations are temporary and academically-oriented, it can be hypothesized that international students will differ in their willingness to integrate to Canada and to the Canadian university context. In this regard, Chirkov and colleagues (2007) found that international students did greatly vary with regard to their willingness to be acculturated into the Canadian host culture. However, it remains to be explored whether this inter-individual variability impacts international students’ university-related adjustment outcomes. The present study attempted to address this gap in the literature by exploring the role of acculturation motivation within the international student experience. Using a mixed-methods design, the narratives of international students with high levels of acculturation motivation were compared to the narratives of international students with low levels of acculturation motivation. Informed by this qualitative comparison,
hierarchical regression analyses where then used to test whether acculturation motivation predicts international student adjustment as well as future permanent migration plans.

**Theoretical Considerations**

The United Nations Educational, Scientific, and Cultural Organization (UNESCO; 2006) defines international students as mobile students who are non-citizens of the host country, who do not have permanent residency in the host country, and who did not receive prior education in the host country (Fritz, Chin, & DeMarinis, 2008). Beyond this preliminary definition, international students also represent a number of coexisting roles that are embedded within complex developmental and sociocultural frameworks. In particular, apart from their student status, international students can also be viewed as emerging adults and as sojourning migrants.

**Emerging adulthood.** Emerging adulthood is a developmental interim between adolescence and adulthood, roughly spanning the ages of 18 through 30 (Arnett, 2000, 2007, 2012). The theory of emerging adulthood posits that individuals in Western industrial societies typically undergo a period of frequent change and exploration prior to settling into permanent adult roles, such as those involved with career, marriage, and parenthood (Arnett, 2000, 2007, 2012). Despite the recent recognition of the emerging adulthood life stage, it has been largely debated whether it is a universally experienced life stage or, in contrast, a Western cultural construction (Badger, Nelson, & Wu, 2004). For example, emerging adulthood may be less pronounced or nonexistent in non-Western cultures that value an earlier transition to adulthood and forego this “in between” period (Arnett, 2012; Barry & Nelson, 2005; Walsh, Shulman, Feldman, & Maurer, 2005). Given that international students come from a variety of cultural backgrounds, it can therefore be questioned whether they also represent part of the emerging adult demographic. However, international students that attend North American post-secondary
institutions share a key feature that likens them to their North American emerging adult peers. That is, international students who take part in a sojourn abroad typically have also postponed engaging in permanent adult roles in order to pursue higher levels of education. Thus, from a developmental perspective, international students can be considered within the emerging adulthood demographic (Wintre et al., 2013).

Nonetheless, international students may only represent a unique subset of this demographic in the host country. Given the added implications of international students’ migrant status, international students must also navigate distinct developmental tasks, separate from those of their North American emerging adult peers. In this regard, research on the developmental outcomes of emerging adult migrants has shown that having to manage both developmental and migratory tasks simultaneously can lead to greater difficulties in personal and social adjustment (Walsh et al., 2005). When exploring the international student experience, it is therefore important to consider that international students are, like their Canadian peers, confronted by developmental demands of the emerging adulthood period (i.e., identity explorations, instability, self-focus, “feeling in-between”, and possibilities) but, unlike their Canadian peers, confronted by demands unique to their migratory status (Arnett, 2000, 2007, 2012).

**International students as sojourners.** Regardless of future residency intentions, international students initially migrate to Canada on a temporary study permit. Thus, from a sociocultural perspective, international students are sojourners: migrants who voluntarily leave their home country on a time-limited basis in order to accomplish a specific academic, personal, or employment-related objective (e.g., international students, military personnel, foreign aid workers; Berry, 2006; Brein & David, 1971; Pedersen, Neighbors, Larimer, & Lee, 2011). Considering this definition, two key features distinguish sojourner migrations from permanent
migrations. First, compared to voluntary immigrant or refugee migrations, sojourner migrations are motivated by non-residency related goals (Pedersen et al., 2011). For international students in particular, motivations to study abroad are primarily academically oriented. In this regard, Wintre and colleagues (2013) demonstrated that international students’ most frequently endorsed reason for studying abroad was the pursuit of a high quality education. Second, compared to that of permanent migrations, the duration of sojourner migrations are either temporary or undetermined. Consequently, some international students may only remain in the host country for the extent of their degree, while others may wish to pursue residency once their academic objectives have been met. For those who do intend to pursue post-graduation residency, the transition from temporary to permanent migrant is contingent on a successful residency application, a process that is not always easy or straightforward. Resulting from this temporal ambiguity, international students have been found to downgrade concerns of cultural adaptation and instead to prioritize concerns of academic adaptation (Cheung & Yue, 2013; Pedersen et al., 2011). As such, when investigating the international student experience, it is important to consider not only the implications of international students’ migrant status, but also the effect of the unique goal-oriented and temporal characteristics of their migrations.

**Developmental model of international student adjustment.** Given that international students can be defined as students, as emerging adults, and as sojourning migrants, models of international student adjustment must jointly consider these multiple roles. In this regard, Chavoshi and Wintre (2013) tested a developmental model of international student adjustment that included three sets of sequential predictors: (1) distal predictors, such as demographic variables (i.e., age, gender, family income, parental education), region of origin, and high school grade point average (i.e., GPA); (2) transitional predictors, such as international students’ level
of autonomy towards their decision to study abroad and international students’ level of perceived parental reciprocity; and (3) proximal predictors, such as their self-perceived English competence, levels of social support, current place of residence (i.e., on or off campus), the goodness-of-fit between their needs and the university setting, and their perceptions of university support and structure.

This model revealed several notable findings. First, within the set of distal predictors, both demographic variables and high school GPA were not significant. Given that current international student recruitment criteria rely on prior academic success, the lack of relationship between high school GPA and international student adjustment is of interest. Second, English language proficiency, as measured by scores on the Test of English as a Foreign Language (TOEFL) and/or on the International English Language Testing System (IELTS) did not predict international student adjustment. Instead, international-students’ self-reported level of English competence, as measured by self-rated perceptions of English understanding, speaking, and writing, did significantly predict international student adjustment, as measured by the Student Adaptation to College Questionnaire (Baker and Siryk, 1989). As echoed by previous studies, international students’ self-perceived English abilities tend to have a greater impact on their cross-cultural adjustment, compared to that of their actual English language abilities (Lewthwaite, 1997). Finally, the largest proportion of variance in international students’ overall adjustment (i.e., over 35%) was accounted for by variables included within the proximal set of predictors. Specifically, international students’ perceptions of social support and of university support and structure significantly contributed to predicting adjustment, both overall as well as across psychological, social, academic, and institutional domains. Taking these findings together,
Chavoshi and Wintre (2013) concluded that contextual variables account for the largest role in international student adjustment, above that of any personal trait, attribute, or characteristic. However, the individual predictors (i.e., distal predictors) included in Chavoshi and Wintre’s (2013) model, such as age, gender, country of origin, and high school GPA, were mainly limited to socio-demographic and academic variables. This primary focus on socio-demographic and academic variables reflects current recruitment practices in North American post-secondary institutions, such that international students are selected on the basis of high school GPA and English language proficiency scores. However, if such variables are not predictive of international student adjustment, then other potential individual variables that can help identify good candidates for a positive international student experience should be explored.

**Acculturation motivation.** Acculturation refers to a long-term process of cultural and psychological change that results from contact between culturally dissimilar people, groups, and social influences (Berry, 2005; Gibson, 2001). Traditionally, Berry’s (1997) fourfold model of acculturation (i.e., assimilation, integration, separation, and marginalization) has been the dominant paradigm in acculturation research. However, a common criticism of traditional acculturation models is that they resort to a “one size fits all” view of acculturation (Rudmin, 2003; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). For example, the fourfold model of acculturation has focused on the acculturation of permanent migrants and has been utilized mainly with voluntary immigrant or refugee samples (Smith & Kawaja, 2011; Ward & Searle, 1991). Given that temporary migrants differ from permanent migrants in the duration and objectives of their migration, extending such models to sojourner migrations may not be warranted (Smith & Kawaja, 2011). Specifically, there are two main reasons why temporary migrants’ acculturation process can be considered as conceptually distinct from that of
permanent migrants. First, from a temporal perspective, sojourners are simply not in the host country long enough (Chirkov et al., 2007; Pedersen et al., 2011). Acculturation is a long-term process that can take years, generations, and even centuries (Berry, 2006). Seeing that international students’ cross-cultural exposure is time-sensitive, the longevity of this process is problematic. Second, from a practical perspective, acculturation is not as imperative for sojourners as it is for permanent migrants (Kim, 2001; Ting-Toomey, 1999). International students are cognizant that they will most likely return to their home country once their educational goals have been met and are more inclined to focus on objectives of academic success rather than on objectives of cultural integration (Cheung & Yue, 2013; Pedersen et al., 2011). Compared to permanent migrants, international students are therefore less likely to accord functional value to learning about the host country environment. According to Kim’s (2001) theory of cross-cultural adaptation, it is this low willingness to adapt that primarily distinguishes temporary migrants from permanent migrants.

Considering the aforementioned differences between permanent and nonpermanent migrants, it becomes apparent why temporary migrant acculturation should be explored separately from permanent migrant acculturation. In this regard, Chirkov and colleagues (2007) argue that when investigating international student acculturation, it is more relevant to address the construct of acculturation motivation than that of acculturation orientations. Acculturation motivation refers to a migrant’s willingness to learn about the host culture, to develop friendships with host members, and to explore the host country’s social and cultural environment (Chirkov et al., 2007).

However, the role of acculturation motivation is still poorly understood within the international student literature. The limited studies that have explored acculturation motivation
can be summarized in three main findings. First, despite the low integration willingness of temporary migrants, international students have been found to vary in their motivation to acculturate to the host country culture (Chirkov et al., 2007). Given this individual variability, it can be further explored whether acculturation motivation can account for some of the individual variation in international student adaptation outcomes, over and above those expected from socio-demographic differences, such as country of origin. Second, greater acculturation motivation has been related to greater international student adjustment (Chirkov et al., 2007, 2008). For example, in a multi-site study across three Canadian universities, Chirkov and colleagues (2008) found that international students’ level of acculturation motivation was positively related to psychological well-being and negatively related to psychosomatic and social difficulties. However, the relationship between acculturation motivation and university-related adjustment outcomes remains to be explored. Third, contrary to constructs of permanent migrant acculturation, international students’ level of acculturation motivation has been found unrelated to length of host country exposure. Specifically, in Chirkov and colleagues’ (2007) study investigating Chinese students’ motivational factors in studying abroad, acculturation motivation was uncorrelated with time spent in Canada. There are two potential explanations for this lack of association. On one hand, it can be hypothesized that acculturation motivation is less vulnerable to changes over time and is therefore a stable predictor of international student adjustment. On the other hand, it can also be hypothesized that this finding relates to cultural distance. Cultural distance refers to the extent in which an individual’s home culture is perceived to differ from the host culture, such that international students’ from more proximal cultures are expected to experience less acculturative stress and greater host country integration, compared to those from more distant cultures (Wan, Chapman, & Biggs, 1992; Ward & Kennedy, 1993). Given that
Western and Eastern cultures tend to be viewed at polar ends of the cultural distance continuum, this lack of association may reflect the perceived cultural distance between China and Canada, rather than the construct of acculturation motivation (Hofstede, 1980; Pedersen et al., 2011). It therefore remains to be clarified whether the stability of acculturation motivation found in Chirkov and colleagues’ (2007) study relates to the international student sojourn as a whole or, in contrast, simply reflects a unique characteristic of the international Chinese student sojourn. This distinction is an important one to make, because it will further inform on the reliability and validity of acculturation motivation as a predictor of international student adjustment.

**Methodological Consideration**

Beyond the aforementioned theoretical considerations, there is one methodological consideration that should be noted. Within the acculturation literature, the dominance of purely quantitative designs has been widely criticized and, as a result, various researchers have suggested that qualitative methods be included in investigations of the international student experience (Chirkov, 2009; Rudmin, 2003; Smith & Khawaja, 2011). There are two main reasons that justify the use of qualitative research. First, although a plethora of measures exist for quantifying the international student experience, there is limited research that actually addresses what the international student experience *is*. Most measurement scales that assess the international student sojourn have originated from a top-down, rather than a bottom-up process of measurement construction. From the studies that have incorporated qualitative methods, contradicting evidence has been found between responses obtained from quantitative measures and those obtained from qualitative measures (e.g., interviews, discussion groups; e.g., Chavajay & Skowronek, 2008). This inconsistency may directly result from the fact that the current literature is not sufficiently informed to construct adequate measures of the international student.
sojourn. Qualitative methods of inquiry would not only allow international students to voice their experiences, but would also shed light on aspects of the international student experience that current research may be neglecting. A second reason justifying qualitative research concerns language limitations. It is important to remember that for a percentage of international students, the host country language is not their primary language. Considering the specificity of the language used in standardized measures, language barriers can lead to misinterpretations and introduce additional measurement error. Thus, by including qualitative methods of data collection, international students are given the opportunity to express themselves in a natural and ecologically valid way. When both the interviewer and interviewee can clarify ambiguous information, language constraints can be minimized.

The Present Study

Given the limited research and understanding surrounding acculturation motivation (AM), the present study adopted a mixed-methods approach to exploring the role of acculturation motivation in the international student experience. Mixed-methods research is a type of research design that involves “the collection, analysis, and integration of quantitative and qualitative data into a single or multiphase study” (Johnson, Onwuegbuzie, & Turner, 2007). When designing a mixed-methods study, issues of priority, implementation, and integration must be addressed (Creswell & Clark, 2007). Priority refers to which method, either quantitative or qualitative, is most important within the study. Implementation refers to either the concurrent or sequential order in which quantitative and qualitative data are collected and analyzed. Integration refers to when the “mixing” or unification of quantitative and qualitative data occurs. In the present study, even though both qualitative and quantitative data were collected concurrently, qualitative data was fully analyzed prior to the quantitative data. This order was adopted since the reason for
mixing was (1) to seek a quantitative validation of our qualitative findings, also known as triangulation, and (2) to extend our qualitative findings with subsequent quantitative investigations, also known as expansion (Greene, 1989). Considering this order of data analysis, the present study adopted an exploratory sequential design, such that the priority was qualitative, the implementation was sequential (i.e., qualitative analyzed first), and the integration took place during data analyses and interpretation (Creswell & Clark, 2007).

The present study therefore unfolded in two-phases. In the first phase, a qualitative thematic approach was used to code and analyze transcripts stemming from open-ended interviews with international students. The overarching goal of this phase was to compare and contrast the experiential accounts of international students with high levels of AM to that of international students with low levels of AM. In the second phase, a quantitative regression approach was used to test whether AM is a viable individual predictor of international student adjustment and future residency intent. The overarching goal of this phase was to test, generalize, and extend findings from the qualitative phase.

**Phase 1: Comparing the international student experience between students with high and low acculturation motivation.** First and foremost, the present study sought to explore the construct of AM, while simultaneously addressing the lack of qualitative research within the international student literature. Given that AM is still poorly understood, a qualitative investigation would not only allow for novel explorations of this construct, but would also guide subsequent quantitative analyses. As a result, the research aims of our qualitative investigations were twofold. The first goal was to explore the international student experience holistically. That is, regardless of level of AM, the aim was to report what general themes could be used to describe international students’ experience in Canada. Following this initial analysis, the second
goal was to then separate international students by level of acculturation motivation, such that the experiential accounts of international students with high levels of AM could be compared to that of international students with low levels of AM. The aim of this comparative analysis was to explore whether international students with differing levels of AM described qualitatively different experiences in Canada.

**Phase 2: Testing acculturation motivation as a predictor of international student adjustment and future residency intent.** In order to quantify our qualitative findings, we then tested whether AM predicts international student adjustment, over and above what can be accounted for by other individual predictors (i.e., socio-demographic and academic variables). Given that it has been previously demonstrated that AM is positively related to psychological well-being, it was hypothesized that AM would positively predict international students’ overall adjustment, as well as individual domains of adjustment (i.e., psychological, social, academic, and institutional; Chirkov et al., 2007, 2008). In addition, we also wanted to expand our qualitative findings by testing whether AM predicts the likelihood that international students will remain in Canada, post-graduation. Considering that international students who foresee pursuing Canadian residency may attribute greater value to host country interactions, it was hypothesized that increased AM would be associated with future plans of permanent migration.

**Method**

**Participants and Procedure**

Participants included 286 undergraduate international students attending York University in Toronto, Canada. Participant recruitment took place during the spring and summer of 2011 via the listserv of York University’s International Student Office. Participants were compensated $10 for their participation in the online questionnaire (i.e., quantitative data collection, see
Appendix C) and $15 for their participation in the follow-up semi-structured interview (i.e., qualitative data collection, see Appendix D). Data analyses only took place once all questionnaire and interview data were collected. Even though qualitative and quantitative data were collected simultaneously, interview transcripts were analyzed first. Given that not all students who completed the questionnaire took part in the interview, two data sets were derived from the overall sample data.

**Sample 1.** Sample 1 represented a subset of the overall data set, such that only participants who completed both the electronic questionnaire and the interview were considered. From the 286 participants, 82 met this inclusion criterion. In order to comply with the UNESCO (2006) definition of an international student, 11 participants were then excluded due to having received prior education in Canada (i.e., elementary and/or high school). Another participant was excluded for being beyond the emerging adulthood age range (i.e., > 30 years of age; see Table 1 for full descriptives). Sample 1 therefore consisted of 70 participants (70.0% female) whose ages ranged from 18 to 30, with the mean age being 22.20 (SD = 2.31). International students across academic years were considered, with 30.0% of the sample being in the first year, 27.1% in the second year, 20.0% in the third year, and 22.9% in the fourth year or beyond. Given that participants represented 60 different home countries, countries of origin were grouped by region (see Table 2). The largest representation was 27.1% from China, followed by 21.4% from South Asia, 15.7% from East Asia (excluding China), 11.4% from the Caribbean, 10.0% from Africa, 7.1% from the Middle East, 4.3 % from Other, and 2.9% from Latin America.

**Sample 2.** Sample 2 represented the overall data set. As such, all 286 participants who completed the online questionnaire were considered, regardless of whether they completed the follow-up interview or not. From the 286 participants, 20 participants were excluded for being
beyond the emerging adulthood age range (i.e., > 30 years of age; see Table 1 for full descriptives). Sample 2 therefore consisted of 266 participants (63.9% female) in which age ranged from 18 to 30, with the mean age being 21.92 (SD = 2.27). International students across academic years were considered, with 27.4% of the sample being in the first year, 30.5% in the second year, 24.8% in the third year, and 17.3% in the fourth year or beyond. As in Sample 1, countries of origin were grouped by region (see Table 2). The largest representation was 36.8% from China, followed by 15.4% from South Asia, 14.3% from East Asia (excluding China), 8.6% from the Caribbean, 7.9% from Africa, 7.9% from Other, 4.9% from the Middle East, and 4.1% from Latin America.

**Measures**

**Demographics.** All participants reported their age, gender, country of origin, academic year, current academic average, marital status, family income, and current place of residence (see Table 1).

**Acculturation Motivation Scale (AMS).** International students’ level of AM was measured with the corresponding Acculturation Motivation Scale (AMS) developed by Chirkov and colleagues (2007). The AMS is a 15-item measure that assesses international students’ willingness to interact with the Canadian culture and members. Participants were asked to rate their level of agreement with various statements on a five-point Likert-type scale (4 = “strongly agree”; 0 = “strongly disagree”), with higher total scores on the AMS indicating greater motivation to acculturate. Two examples items are “I am interested in learning more about Canada”; “I try to avoid interactions with Canadians unless it is absolutely necessary”. Present Cronbach alphas was .87.
Future residency intent. International students’ future residency intentions were assessed in the interview portion. Participants’ response to the interview question, “After your education, do you intend to return home or stay in Canada?” was coded as either intending to remain in Canada or not intending to remain in Canada (i.e., returning home or undecided). An inter-rater reliability for future residency intent was established using Cohen's kappa (κ = .82).

Self-perceived English competence. English proficiency was measured by taking the average of three questions that asked participants to rate their proficiency in the areas of understanding, speaking, and writing, based on a five-point Likert-type scale (5 = “extremely satisfied”; 1 = “extremely dissatisfied”). Present Cronbach alpha was .88.

Student Adaptation to College Questionnaire (SACQ). The Student Adaptation to College Questionnaire developed by Baker and Siryk (1989) is a 67-item questionnaire that measures overall adjustment to university, as represented by the SACQ Total score, as well as adjustment in four specific domains: (1) the Personal-Emotional Subscale (15 items); (2) the Social Subscale (20 items); the Academic Subscale (24 items), and the Institutional Attachment Subscale (7 items). Participants were asked to rate their level of agreement with various statements on a nine-point Likert-type scale (9 = “applies very closely to me”; 1 = “doesn’t apply to me at all”). An example of items from each scale respectively includes, “I am experiencing a lot of difficulty coping with the stresses imposed on me in university”, “I am meeting as many people, and making as many friends as I would like at university”, “I am enjoying my academic work at university”, and “Lately I have been giving a lot of thought to transferring to another university”. Higher SACQ Total and subscale scores indicate greater adjustment. The SACQ has been deemed reliable and valid for use with international students (Chavoshi & Wintre, 2013). Present Cronbach alpha for the SACQ Total was .93.
Other measures were included in the online questionnaire, but are not a focus of the present study (see Appendix C).

**International Student Interview.** The International Student Interview is an in-depth semi-structured interview that explores international students’ experience in Canada (see Appendix D; Wintre et al., 2013). Trained research assistants on the campus of York University conducted all interviews in English. From the overall interview, questions reflecting the following facets of the international student experience were analyzed: (1) becoming an international student; (2) perceptions of home and host country and future residency intent; (3) challenges and adjustment; (4) fulfillment of pre-migration expectations; (5) international and domestic group relations; and (6) perceptions of university support and services. All interviews were audio recorded and then transcribed verbatim into written text. Prior to coding, each transcription was read and re-read several times, as prescribed by Braun and Clarke’s (2006) “repeated reading” procedure. All interviews were coded with Dedoose, an online data management program (www.dedoose.com).

**Results**

**Phase 1: Qualitative Findings**

**Preliminary analysis.** To ensure that participants in our sample were not particularly high or low in AM we compared the distribution of the AMS measure in our sample ($M = 3.87$, $SD = 0.64$, $\alpha = .85$) to the distribution of the AMS measure in Chirkov and colleagues’ (2007) sample ($M = 3.78$, $SD = 0.48$, $\alpha = .81$) Given that the AMS distribution statistics were similar across both studies, it can be assumed that our sample reflected typical AM levels of international students sojourning in Canada.

Next, participants from Sample 1 who met the criteria for either high or low AM were categorized into one of two groups based on their scores on the AMS ($M = 57.72$, $SD = 9.97$).
The low AM group \((n = 14)\) included participants whose AMS score was more than one standard deviation below the overall AMS mean (i.e., low AM group = AMS score < 47.72), whereas the high AM group \((n = 10)\) included participants’ whose AMS score was more than one standard deviation above the overall AMS mean (i.e., high AM group = AMS score > 67.72).

**General thematic analysis.** Following this preliminary analysis, interview transcripts from the two comparison groups were analyzed in a stepwise manner. First, the data were coded and grouped into themes according to the thematic analysis methodology outlined by Braun and Clarke (2006). During this initial stage, the coder was blind to whether transcripts originated from the low AM or the high AM group. The goal of this analysis was to treat international students as a homogenous group and to identify overarching themes representing international students’ experience in Canada, regardless of levels of AM. Two global themes were derived from the data: (1) “just surviving” and (2) “thriving”. Each global theme was then further divided into organizing themes (see Figure 1 and Figure 2 for a thematic map of each global theme). Note that the same unit of text could be assigned to more than one organizing theme simultaneously (e.g., language barriers specific to making social connections could represent both cross-cultural challenges and social challenges; Tesch, 1990).

1. **Just surviving.** The first common global thread throughout international students’ narratives was that simply being an international student can lead to a host of difficulties. These difficulties were considered barriers to international students’ adjustment and reflected the idea that they are “just surviving”:

   “I would tell them [friends who are contemplating studying abroad] it’s not easy to study abroad […] it’s definitely harder than studying in China, because you’re studying very professional knowledge in another language. And not just academic challenges, but also personal ones…” (Female, 21, China)
The global theme “just surviving” included the various post-migration challenges described by the international students in our sample. A total of seven organizing themes reflected these different barriers (see Table 3).

a) A face in the crowd. The first organizing theme, “a face in the crowd” (endorsed by 66.7%), was characterized by international students’ feelings of loneliness and homesickness. An example excerpt of “a face in the crowd” is:

“Basically I don’t feel like I belong here. I feel yeah… lost in the crowd and stuff. I haven’t really found my place yet.” (Female, 21, Kenya)

b) Academic challenges. The second organizing theme, “academic challenges” (endorsed by 91.7%), described the various difficulties international students faced within the academic domain. “Academic challenges” was further broken down into three basic components: (1) disappointment in the quality of education; (2) challenges in having to read, write, and present academic material in English; and (3) difficulties in having to keep up with a competitive, foreign, and demanding academic environment. An example excerpt of “academic challenges” is:

“I am not doing very well. I should be asking questions, meeting the professor one on one. I feel that in a big class, I am the only one doing horrible…. But then the results come out and I know I am not the only one. I have been on the bottom side, and never in my life have I done this bad.” (Female, 20, Malaysia)

c) Cross-cultural challenges. The third organizing theme, “cross-cultural challenges” (endorsed by 45.8%) was characterized by difficulties in discovering and learning the social norms, prescriptions, and customs of a foreign culture. An example excerpt of “cross-cultural challenges” is:
“The way people express himself or herself. For example first I come to Canada and people ask me “how you doing?” I don’t know how to answer. In China we don’t ask that.” (Female, 24, China)

d) Negative university perception. The fourth organizing theme, “negative university perception” (endorsed by 45.8%), described international students’ feelings of disappointment or resentment toward the internal structure, bureaucracy, and services provided by the university. “Negative university perception” was comprised of two basic components: (1) lack of support, guidance, and assistance from the university and (2) an overall mismatch between the university environment and international students’ needs and/or expectations. An example excerpt of “negative university perception” is:

“It is not only the education that matters, but it is the environment that matters […] If I pay 20,000 a year, I expect something better.” (Male, 25, Pakistan)

e) Making friends is hard. The fifth organizing theme, “making friends is hard” (endorsed by 66.7%), reflected the challenges international students face in establishing social connections. This theme was further broken down into four basic components: (1) domestic students are uninterested in socializing with international students; (2) Canadian students’ social preferences are different and/or incompatible with that of international students; (3) establishing social connections is hindered by personal limitations (e.g., shyness); and (4) difficulties in communicating in English leads to difficulties in making friendships. An example excerpt of “making friends is hard” is:

“I think it’s the English problems and they cause that I can’t talk with them very well with speaking and with listening and maybe they say something very funny or we talk about something I don’t know and I can’t join with them. It was harder to make friends.” (Male, 21, China)
f) Struggling with self-reliance. The sixth organizing theme, “struggling with self-reliance” (endorsed by 66.7%), described the difficulties international students faced with having to transition to adulthood. “Struggling with self-reliance” was comprised of two basic components: (1) financial challenges and (2) feeling unprepared. An example excerpt of “struggling with self-reliance” is:

“I don’t know… I was pretty young. I was like 16 and I had culture shock, I guess that is what it can be called […] I just expected things to happen, but they never do […] I was just not ready to maybe leave yet.” (Female, 21, Kenya)

g) Canada as negative. The final organizing theme, “Canada as negative” (endorsed by 58.3%), described the shortcomings of living in Canada. “Canada as negative” was comprised of two basic components: (1) Canada does not live up to its reputation of being a great country and (2) Canadians customs, values, and norms are perceived as strange and incompatible. An example excerpt of “Canada as negative” is:

“I have heard of various safety issues. There are murders, rapes, there are bomb threats …like this is no better than the country that I came from” (Male, 25, Pakistan)

2. Thriving. Despite these overall challenges, the common thread found in international students’ narratives was that being an international student could also be an extraordinary experience. This recognition that the international student experience does not solely result in challenges, but also in successes, reflected the idea that some international students are “thriving”:

“I’ve had the most amazing experience. I love York so much - I’ve learned so much. It’s been great. I’ve had some amazing professors, and I am very much satisfied with the academic side of everything […] and there is like so much social life and so much to do and so many different events, and a lot of which are free. And it is so easy to make friends. You can meet people from all over the world, and it is really really incredible.” (Female, 24, Kazakhstan)
Thus, in contrast to “just surviving”, the global theme “thriving” included the various post-migration successes described by the international students in our sample. A total of six organizing themes reflected these favourable outcomes (see Table 4 for full descriptions of each basic theme with accompanying example excerpts).

a) Academic satisfaction. The first organizing theme, “academic satisfaction” (endorsed by 62.5%), was defined by international students’ flourishing within the academic domain. “Academic satisfaction” consisted of two basic components: (1) academic progress over time and (2) good grades and overall academic success. An example excerpt of “academic satisfaction” is:

“I came at a point where it had to be a priority. So I made sure I got into the right courses, took all the right steps…. I adjusted. I had my schedule. I had time management when it comes to that. That’s been great- I’m back on track.” (Female, 21, Kenya)

b) Cross-cultural adjustment. The second organizing theme, “cross-cultural adjustment” (endorsed by 37.5%), described factors that international students’ perceived as having facilitated their adjustment to Canada and to the Canadian culture. “Cross-cultural adjustment” was comprised of two basic themes: (1) being in a multicultural setting facilitates feelings of inclusion and (2) feeling competent in English makes the transition smoother. An example excerpt of “cross-cultural adjustment” is:

“It’s such a diverse community here, students from everywhere …it was much much easier.” (Male, 22, Singapore)

c) Positive university perception. The third organizing theme, “positive university perception” (endorsed by 33.3%), was characterized by international students’ perception that the university environment and resources match their individual needs. An example excerpt of “positive university perception” is:
“[…] services are great for international students especially. That’s one thing I really cherish in the university - when there are people at hand, offices and places that facilitate the transition of coming in and giving resources around the city and around the campus.” (Female, 23, Syria)

d) Making friends is easy. The fourth organizing theme, “making friends is easy” (endorsed by 45.8%), captured the idea that social connections are easily established when being proactive and engaged within the university. An example excerpt of “making friend is easy” is:

“I made a lot of friends in my first year because of participating in everything […] I very much learned that there are these wonderful people around me and I am so proud to be their friend and so on. And yeah, I mean it so easy to make friends here, so easy to meet people.” (Female, 23, Syria)

e) Worth the growing pains. The fifth organizing theme, “worth the growing pains” (endorsed by 45.8%), described how international students’ prized their overall experience abroad. “Worth the growing pains” was further broken down into three basic components: (1) lack of regret over deciding to study abroad; (2) each individual is the master of their own destiny; and (3) being an international student leads to personal independence and developmental maturation. An example excerpt of “worth the growing pains” is:

“I mean there’s always an apprehension when you move to somewhere else, everything is new […] So I had a bit of apprehension but as time goes by it ended up being great experience.” (Male, 19, Mauritius)

f) Canada as positive. The final organizing theme, “Canada as positive” (endorsed by 62.5%), was characterized by the positive implications of living in Canada. “Canada as positive” consisted of two basic components: (1) good quality of life in Canada and (2) Canada is a tolerant country, because it is a multicultural country. An example excerpt of “Canada as positive” is:
“Okay, so first of all as I’ve said, everything is for people here - especially in university-it is just really I can feel it, and I can feel the difference. Second, this probably should have been first, almost no corruption. If something is written down as a law, it is going to be upheld, and I should not be worried [...]. People are very friendly. It is just very nice. I don’t know, I feel like people are quite positive and yeah, they know they are going to have some future.” (Female, 24, Kazakhstan)

**Comparative thematic analysis.** The second step of our qualitative investigation involved a comparative thematic analysis. The objective of this comparative analysis was to explore the thematic differences and consistencies between the experiential accounts of international students with low AM and that of international students with high AM. Thus, following the general thematic analysis, group membership was revealed and the themes endorsed within the transcripts of the low AM group were compared to the themes endorsed within the transcripts of the high AM group. Note that given the qualitative nature of this comparison, we could only speak to the pattern of theme endorsement within each group.

1. **Just surviving.** Both the low AM and the high AM group endorsed several organizing themes and basic components within the global theme of “just surviving”. However, the pattern of theme and component endorsement differed across groups (see Figure 3).

   a) *A face in the crowd.* 85.7% of international students in the low AM group voiced feelings of loneliness and homesickness, compared to 40.0% of international students in the high AM group.

   b) *Academic challenges.* The organizing theme “academic challenges” was somewhat equally present across both groups (low AM = 100.0%; high AM = 90.0%). However, differences were found within the basic components of “academic challenges”: (1) 35.7% of international students in the low AM group voiced disappointment in the quality of education received, compared to 0.0% in the high AM group; (2) the challenges involved in pursuing a
degree in English was described by 64.3% of international students in the low AM group, compared to 40.0% of international students in the high AM group; and (3) the struggles related to studying in Canada were described by 71.4% of international students in the low AM group, compared to 70.0% of international students in the high AM group. As such, even though international students with low and high AM comparably described academic challenges, the nature of the challenges experienced within the academic domain shared both similarities (i.e., struggling to keep up) and differences (i.e., disappointment in quality, academics in English) across groups.

c) Cross-cultural challenges. 57.1% of international students in the low AM group reported experiencing difficulties with respect to learning the cultural protocol, compared to 30.0% of international students in the high AM group.

d) Negative university perception. The organizing theme “negative university perception” was more frequently endorsed by international students in the low AM group (low AM = 64.3%; high AM = 30.0%). This pattern was also consistent within the basic components of “negative university perception”: (1) 50.0% of international students in the low AM group described feeling confused and unsupported by the university, compared to 30.0% of international students in the high AM group and (2) 42.9% of international students in the low AM group described a mismatch between their expectations and the university environment, compared to 10.0% of international students in the high AM group.

e) Making friends is hard. The organizing theme “making friends is hard” was more frequently endorsed by international students in the low AM group (low AM = 100.0%; high AM = 20.0%). Within the basic components of “making friends is hard” a similar pattern was observed: (1) 57.1% of international students in the low AM group alluded to domestic students
being uninterested in socializing with international students, compared to 0.0% of international students in the high AM group; (2) 64.3% of international students in the low AM group expressed that Canadian socialization practices were incompatible with their own, compared to 10.0% of international students in the high AM group; (3) 64.3% of international students in the low AM group expressed that their ability to make local connections was hindered by personal limitations, compared to 10.0% of international students in the high AM group; and (4) 64.3% of international students in the low AM group described their level of English as being a socialization barrier, compared to 10.0% of international students in the high AM group.

f) Struggling with self-reliance. The theme “struggling with self-reliance” was comparably described across both groups (low AM = 64.3%; high AM = 60.0%). However, differences were found within the basic components of “struggling with self-reliance”. That is, even though both groups equally endorsed the theme of financial struggles (50.0% in each group), international students in the low AM group also raised more frequently that they were not developmentally ready to become independent (71.4%), compared to international students in the high AM group (10.0%).

g) Canada as negative. The organizing theme “Canada as negative” was more frequently endorsed by international students in the low AM group (low AM = 71.4%; high AM = 40.0%). Even though both groups similarly endorsed that Canadian customs, values, and norms are perceived as strange (low AM = 28.6%; high AM=20.0%), the groups differed with regard to the perception that Canada does not live up to its positive reputation (low AM = 64.3%; high AM = 20.0%).

Taken together, these findings suggest that there are both thematic similarities and thematic differences in the narratives of international students with low AM and those with high
AM. With regard to differences, a pattern was revealed in which experiences of isolation, of cross-cultural challenges, of negative university perceptions, and of lacking social connections was more thematically present in the low AM group, compared to the high AM group. With regard to similarities, academic and developmental challenges seemed equally voiced within the low AM and the high AM group. However, the nature of these challenges differed across groups. Overall, the experience of negative post-migration outcomes (i.e., “just surviving”) was more thematically present in international students with low AM, compared to international students with high AM.

2. Thriving. International students in both the low AM and the high AM group endorsed several themes within the global theme “thriving”. However, as in “just surviving”, the pattern of endorsement varied across groups (see Figure 4).

a) Academic satisfaction. Contentment within the academic domain was similarly expressed across groups (low AM = 64.3%; high AM = 70.0%). This comparable academic experience was also evident within the basic components: (1) both groups equally described their perceived academic progress over time (low AM = 35.7%; high AM = 40.0%) and (2) their academic success (low AM = 35.7%; high AM = 40.0%).

b) Cross-cultural adjustment. The theme “cross-cultural adjustment” was less present in the low AM group (low AM = 21.4%; high AM = 50.0%). Within the basic components of “cross-cultural adjustment” a similar pattern was observed: (1) 14.2% of international students in the low AM group expressed that being in a multicultural setting facilitated feelings of inclusion, compared to 30.0% of international students in the high AM group and (2) 14.2% of international students in the low AM group voiced that their comfort with the English language
has facilitated their transition, compared to 30.0% of international students in the high AM group.

c) Positive university perception. 0.0% of international students in the low AM group endorsed that the university environment and resources matched their individual needs, compared to 70.0% of international students in the high AM group.

d) Making friends is easy. 21.4% of international students in the low AM group voiced that being proactive facilitated social connections, compared to 80.0% of international students in the high AM group.

e) Worth the growing pains. The organizing theme “worth the growing pains” was less present in the low AM group (low AM = 21.4%; high AM = 90.0%). This pattern was also observed within the basic components of “worth the growing pains”: (1) 0.0% of international students in the high AM group expressed having no regrets about their decision to study abroad, compared to 70.0% of international students in the low AM group; (2) 7.1% of international students in the low AM group described a sense of agency over their post-migration outcomes, compared to 30.0% of international students in the high AM group; (3) 21.4% of international students in the low AM group described that being an international student facilitated the development of independence and autonomy, compared to 40.0% in the high AM group.

f) Canada as positive. The organizing theme of “Canada s positive” was also less present in the low AM group (low AM = 42.9%, high AM = 90.0%). This pattern was evident across the basic components of “Canada as positive”: (1) 21.4% of international students in the low AM group described that Canada represent a good quality of life, compared to 90.0% of international students in the high AM; and (2) 21.4% of international students in the low AM group voiced
that multiculturalism in Canada leads to inclusiveness, compared to 40.0% of international students in the high AM group.

Taken together, these findings also suggest that there are both thematic similarities and differences across the experiential accounts of international students with low AM and those with high AM. With regard to differences, a pattern was revealed in which experiences of cross-cultural adjustment, of positive university perception, of making social connections, and of personal development were more thematically present in the high AM group, compared to the low AM group. With regard to similarities, both groups equally voiced academic satisfaction. Overall, the experience of positive post-migration outcomes (i.e., “thriving”) was more thematically present in international students with high AM, compared to international students with low AM.

**Phase 2: Quantitative Results**

Findings from the comparative thematic analysis revealed an overall pattern in which the valence of international students’ reported experience in Canada thematically differed between the low AM and the high AM group. However, given the qualitative nature of our analysis, we could not speak to the statistical significance of these differences. As such, further quantitative analyses were undertaken. This multi-method approach is known as triangulation, a process in which more than one method is used to ensure that research findings reflect the underlying phenomenon under study, as opposed to the underlying methodology (Campbell & Fiske, 1959; Johnson, Onwuegbuzie, & Turner, 2007). To reach this goal, we tested whether AM could predict international student adjustment, over and above the socio-demographic and academic predictors commonly used in this area.
Beyond triangulation of methods, a second goal of the quantitative portion was to extend our qualitative findings by also exploring international students’ permanent residency intentions. This mixed-methods approach is known as expansion, a process in which quantitative analyses are used in order to extend the breadth of inquiry of a qualitative investigation (i.e., not just about adjustment, but also about residency; Greene, 1989). Given that, compared to permanent migrants, temporary migrants have been found to demonstrate less host country identification and integration, we wanted to test whether AM would predict international students’ intentions of pursuing permanent residency in Canada (Pedersen et al., 2011). Thus, our subsequent quantitative analyses reflected two main hypotheses:

1) AM would predict international student adjustment, such that greater AM would relate to greater adjustment, both overall and across personal-emotional, social, academic, and institutional attachment domains.

2) AM would predict international students’ post-graduation residency intentions, such that increased AM would relate to increased odds of pursuing permanent residency in Canada.

**Data integrity.** All variables of interest were first examined for missing values and accurate data entry. Missing data were random and considered to be minor (i.e., less than 3% of the sample data; Kline, 2009). As per prior convention with the current dataset, missing values were dealt with by mean substitution. That is, if less than one in ten of all items were missing, missing scores were substituted with the mean of participants’ valid responses. Out-of-range values, plausible means, and standard deviations were also examined for all variables of interest (for Sample 1, see Table 5; for Sample 2, see Table 6). Variables of interest showed normal distributions with skewness values below 3 and kurtosis values below 10. Given that there were no concerns, participants’ data were left untransformed.
**The role of AM in international student adjustment.** A series of hierarchical regression analyses were conducted to test whether AM is an individual predictor of international student adjustment. The SACQ was chosen as our outcome adjustment measure for two reasons. First, the SACQ is a multidimensional measure that includes personal-emotional, social, academic, and institutional domains of adjustment, thus mirroring the organizing themes of our qualitative findings. Second, the SACQ has also been validated with an international student sample, further supporting its use as an outcome measure (Chavoshi & Wintre, 2013). AM was therefore tested both as a predictor of overall adjustment, as measured by the SACQ Total score, and as a predictor of distinct domains of adjustment, as measured by the SACQ subscale scores.

In each hierarchical regression model conducted, two sets of predictor variables were used. First, in order to control for the effects of socio-demographic and pre-academic variables on adjustment, age, gender, academic year, high school GPA, Self-perceived English competence, and region of origin\(^1\) were entered in Block 1. Second, in order to determine the unique contribution of AM in international student adjustment, scores on the AMS were entered in Block 2.

**Assumptions.** Diagnostic tests were first conducted to determine whether hierarchical regressions were a viable procedure. As with all hierarchical regressions, assumptions of independence of observations, linearity, homoscedasticity, normally distributed errors, absence of multicollinearity, and lack of unusual points (i.e., outliers, high leverage point, highly influential points) were verified.

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\(^1\) Given that region of origin is an eight-level categorical variable, China, the largest group in our sample (36.80%), was used as the reference group. Results relating to country of origin can therefore be interpreted as a comparison between students from a particular region of origin in relation to students from China.

\(^2\) In order for binary logistic regression to be valid, there cannot be too few cases in a categorical
There were a total of 264 participants from Sample 2 that had completed all required measures used in the hierarchical regression analyses. Given that each value of the outcome variables came from a separate case, independence of observations was assumed. There was also independence of residuals, as assessed by a Durbin-Watson statistic ranging from 1.95 to 2.17. Assumptions of linearity (i.e., predictor variables are collectively and independently linearly related to all outcome variables), homoscedasticity (i.e., equal residuals for all values of the outcome variables), and normally distributed errors (i.e., normal distribution of the residuals) were explored graphically, with no violations found. Variance inflation factor (VIF) values less than ten (VIF = 1.09-1.58) indicated a lack of multicollinearity. Bivariate correlations between SACQ Total, SACQ subscales, and predictor variables were also explored (see Table 7). Finally, the absence of unusual points was verified (i.e., scores were less than three standard deviations from the mean, leverage values were below .20, and Cook’s Distance values were above 1).

**Hierarchical regression analysis on SACQ Total scores.** A hierarchical multiple regression was run to determine if the addition of AM improved the prediction of SACQ Total scores, over and above age, region of origin, gender, academic year, high school GPA, and Self-perceived English competence. For all hierarchical regressions conducted (i.e., SACQ Total and each subscale), unstandardized ($B$) and standardized ($\beta$) regression coefficients are displayed in Tables 8 through 12.

The full model of socio-demographic variables, high school GPA, and AM to predict SACQ Total scores was statistically significant, $F(14, 248) = 5.45$, $p < .001$, and accounted for 24.9% (Adjusted $R^2$) of the variance in SACQ Total scores. The addition of AM to the prediction of SACQ Total scores (Block 2) led to a statistically significant increase in $R^2$ of 5.9%, $F(1, 247) = 19.54$, $p < .001$. In the final model, variables that uniquely contributed to positively predicting
SACQ Total scores were Self-perceived English competence, $\beta = .28, p < .001$ and AM, $\beta = .26, p < .001$. In addition, international students who migrated from the “Other” region of origin category reported higher overall adjustment compared to those who migrated from China, $\beta = .13, p = .04$. In contrast, international students who migrated from the Middle East reported lower overall adjustment compared to those who migrated from China, $\beta = .15, p = .03$.

**Hierarchical regression analysis on SACQ Personal-Emotional Subscale.** The full model of socio-demographic variables, high school GPA, and AM to predict scores on the SACQ Personal-Emotional Subscale was statistically significant, $F(14, 248) = 1.67, p = .04$, and accounted for 3.7% (Adjusted $R^2$) of the variance in SACQ Personal-Emotional Subscale scores. Block 1, which included socio-demographic and pre-academic variables, was not statistically significant ($p = .18$). However, the addition of AM to the prediction of SACQ Personal-Emotional Subscale scores (Block 2) led to a statistically significant increase in $R^2$ of 2.2%, $F(1, 247) = 5.92, p = .01$. In the final model, AM was the only variable that uniquely contributed to positively predicting SACQ Personal-Emotional Subscale scores, $\beta = .15, p = .02$.

**Hierarchical regression analysis on SACQ Social Subscale.** The full model of socio-demographic variables, high school GPA, and AM was statistically significant, $F(14, 247) = 4.61, p < .001$, and accounted for 17.2% (Adjusted $R^2$) of the variance in SACQ Social Subscale scores. The addition of AM to the prediction of SACQ Social Subscale scores (Block 2) led to a statistically significant increase in $R^2$ of 3.8%, $F(1, 246) = 11.88, p = .001$. In the final model, variables that uniquely contributed to positively predicting SACQ Social Subscale scores were self-perceived English competence, $\beta = .34, p < .001$, and AM, $\beta = .20, p < .001$. In addition, compared to international students who migrated from China, lower social adjustment was
Hierarchical regression analysis on SACQ Academic Subscale. The full model of socio-demographic variables, high school GPA, and AM to predict SACQ Academic Subscale scores was statistically significant, $F(14, 247) = 4.59, p < .001$, and accounted for 17.1% (Adjusted $R^2$) of the variance in SACQ Academic Subscale scores. The addition of AM to the prediction of SACQ Academic Subscale scores led to a statistically significant increase in $R^2$ of 2.9%, $F(1, 246) = 9.19, p = .003$. In the final model, variables that uniquely contributed to positively predicting SACQ Academic Subscale scores were self-perceived English competence, $\beta = .30, p < .001$, and AM, $\beta = .16, p = .003$. In addition, international students who migrated from the “Other” region of origin category reported higher academic adjustment compared to those who migrated from China, $\beta = .14, p = .03$.

Hierarchical regression analysis on SACQ Institutional Attachment Subscale. The full model of socio-demographic variables, high school GPA, and AM to predict SACQ Institutional Attachment Subscale scores was statistically significant, $F(14, 247) = 7.84, p < .001$, and accounted for 28.2% (Adjusted $R^2$) of the variance in SACQ Institutional Attachment Subscale scores. The addition of AM to the prediction of SACQ Institutional Attachment Subscale scores led to a statistically significant increase in $R^2$ of 11.09%, $F(1, 246) = 43.16, p < .001$. In the final model, variables that uniquely contributed to positively predicting SACQ Institutional Attachment Subscale scores were self-perceived English competence, $\beta = .26, p < .001$ and AM, $\beta = .36, p < .001$. In addition, international students who migrated from the “Other” region of origin category reported higher institutional attachment compared to those who migrated from China, $\beta = .14, p = .02$. 

reported by international students who migrated from the Middle East, $\beta = .21, p = .001$, and from East Asia, $\beta = .16 p = .02$. 

[35]
The role of AM in future residency intent. Based on the international student interview, 42.9% of our sample reported that they intended on pursuing permanent residency in Canada, once their academic objectives have been met. A hierarchical logistic regression was therefore performed to test whether AM can predict international students’ future residency intentions (i.e., “intend to remain in Canada, “do not intend to remain in Canada”). Three sets of predictor variables were used in this model. The first set included socio-demographic variables (i.e., age, gender, number of years in Canada, self-perceived English competence, and region of origin) that have been found to impact international students’ host country staying intentions (Lu, Zong, & Schissel, 2009; Sykes & Chaoimh, 2013). These variables were entered as Block 1 in the hierarchical logistic regression model. The second set of explanatory variables related to adjustment factors. Previous research supports that a transition to permanent residency is facilitated by temporary migrants’ experiences in the host country (Khoo, Hugo, & McDonald, 2008). As such, international students’ overall adjustment as measured by the SACQ Total was entered in Block 2. To determine the unique contribution of AM in international students’ future residency intent, after controlling for socio-demographic and adjustment variables, scores on the AMS were entered as the final variable in Block 3.

Assumptions. Prior to conducting a logistic regression, diagnostic tests were evaluated to determine whether logistic regression was a viable analysis. As with all binary logistic regressions, the assumptions of independence of errors, linearity of the logit, and absence of multicollinearity needed to be met in order for this statistical procedure to be useful. Given that the categories of the outcome variable were mutually exclusive and exhaustive (i.e., each

---

2 In order for binary logistic regression to be valid, there cannot be too few cases in a categorical predictor. Given how some regions of origin had fewer cases (see Table 2), regions of origin for this analysis were grouped in the following way: (1) China, East Asia, and South Asia (n = 45); (2) Caribbean, Latin America, and Other (n = 13); and (3) Middle East and Africa (n = 12).
response came from a different, unrelated case), independence of errors was assumed. The Box-Tidwell (1962) procedure was then used to test whether there was a linear relationship between the continuous predictors variables and the logit of the dependent variable. A lack of any statistically significant interaction terms between age \( (p = .85) \), SACQ Total \( (p = .89) \), AM \( (p = .63) \), and their log transformation confirmed the linearity of the logit. Finally, VIF values less than ten \( (\text{VIF} = 1.02-1.27) \) indicated a lack of multicollinearity.

**Results.** Block 1, which included the socio-demographic variables, was not a significant block \( (p = .19; \text{Nagelkerke } R^2 = .159) \). The addition of Block 2, which included SACQ Total scores, did not significantly contribute to the model and was not a statistically significant block \( (p = .74; \text{Nagelkerke } R^2 = .161) \). Finally, the addition of Block 3, which included scores on the AMS, was a statistically significant block \( (p < .001; \text{see Table 13}) \).

At Block 3, the overall model was therefore statistically significant, \( \chi^2(8) = 27.48, p < .001 \), and explained 43.6% \( (\text{Nagelkerke } R^2) \) of the variance in future residency intent. Goodness of fit of the model was determined by the Hosmer and Lemeshow test \( (p = .63) \). Prediction success overall was 74.3% \( (66.7\% \text{ for “intend to remain in Canada”, } 80.0\% \text{ for “do not intend to remain in Canada”}) \).

Regarding individual predictors, the Wald criterion demonstrated that only AM made a significant contribution to the prediction \( (p < .001) \) of intent to stay in Canada. Age, gender, academic year, region of origin, self-perceived English competence, and SACQ Total scores were not significant predictors \( (p > .05) \). In addition, the exponentiation of the \( B \) coefficient demonstrates that the odds of remaining in Canada are greater for international students with higher scores on the AMS. That is, for every one unit increase on the AMS, the odds of remaining in Canada are also increased by 20.0%, \( EXP(B) = 1.20 \).
Discussion

Despite the breadth of research on the international student sojourn, individual characteristics that are not socio-demographic or academic in nature, such as motivation, have been less extensively investigated. Addressing this oversight, the present study sought to explore the role of acculturation motivation (AM) within the international student experience. Using a mixed-methods design, the experiential accounts of international students with low levels of AM were first compared to those with high levels of AM. Informed by the pattern of theme endorsement from this qualitative analysis, further quantitative analyses were undertaken. The aims of mixing qualitative and quantitative analyses were (1) to validate our initial qualitative findings by testing whether AM predicts international student adjustment and (2) to expand our qualitative findings by testing whether AM predicts international students’ permanent residency intentions.

Defining International Students’ Experience in Canada

When exploring international students as a homogenous group (i.e., regardless of level of AM), international students’ narratives were represented by two contrasting global themes: “just surviving” and “thriving”.

The global theme “just surviving” reflected the negative adjustment outcomes and host country perceptions voiced by the international students in our sample. Post-migration difficulties were present across multiple domains, such as academic, social, personal, institutional, and cross-cultural. These findings are consistent with the current literature which suggests that international students’ temporary migrant and student status render them at an increased risk for adjustment concerns within these domains (Berry, Kim, Minde, & Mok, 1987; Chavajay & Skowronek, 2008; Smith & Khawaja, 2011). Previous studies have also
demonstrated that the greater the perceived discrepancy between home and host culture, the poorer the adjustment outcomes (Pedersen et al., 2011; Ward & Kennedy, 1993). In this regard, international students unfavourable views of Canada were described in terms of disappointment and cultural incompatibility. Overall, findings from the global theme “just surviving” provide further support for the existence of adjustment difficulties and negative host country perceptions within the international student experience.

However, the global theme “just surviving” also highlighted one area that is not as prominent within the international student literature. That is, developmental struggles relating to being an emerging adult, such as becoming independent and autonomous, have been largely overlooked in international student samples (c.f. Arnett, 2000, 20012). When such struggles have been considered, they tend to be limited to financial difficulties (Smith & Khawaja, 2011). While the cross-cultural applicability of the emerging adulthood life stage has been debated, the organizing theme “struggling with self-reliance” suggests that international students attending North American post-secondary institutions share developmental similarities with their domestic emerging adult peers. Yet, as previously noted, international students’ migrant status may also differentiate them from their domestic peers, making them a unique subset of the emerging adulthood demographic. Not only must international students manage becoming independent and self-sufficient, like domestic students, but also, unlike domestic students, they must navigate these developmental demands within a foreign culture. International students are therefore simultaneously confronted by a novel cultural experience and a novel developmental experience. Given the added complexity of being both an emerging adult and a migrant, further explorations international students’ emerging adulthood stage is therefore warranted.
The second global theme, “thriving”, represented an alternate experience to the theme “just surviving”. That is, the international student experience was not only represented by challenge and adversity, but also by progress and success. In an ethnographic study, Brown (2009) similarly demonstrated that international students’ cross-cultural transitions could lead to various positive outcomes, such as increased intercultural competence and self-understanding. Comparable to “just surviving”, achievements within the global theme “thriving” were expressed across academic, social, institutional, cross-cultural, and developmental domains. In addition, positive, rather than negative perceptions of Canada were captured by this theme. As in the “just surviving” global theme, overall findings from the “thriving” global theme further support the current literature, such that the international student experience is not limited to negative host country perceptions and outcomes, but can also include positive host country perceptions and outcomes.

However, there was one domain that was not equally present across both global themes. That is, international students described personal-emotional difficulties involved in their transition within the “just surviving” theme (i.e., “a face in the crowd: homesick and lonely”), but they did not describe similar personal-emotional successes within the “thriving” theme. One potential explanation for this finding is that initial personal-emotional difficulties, such as homesickness, may represent a typical theme of cross-cultural transitions and, in particular, of the international student transition. In this regard, McLachlan and Justice (2009) found that 95.0% of international students reported some initial levels of homesickness, loneliness, and/or isolation. Given that personal-emotional difficulties seem to reflect an inherent part of the international student sojourn, university and government-related welcoming initiatives should focus on aiding international students in overcoming these challenges.
Taking our overall findings together, it can be summarized that the international student experience represents both negative (i.e., “just surviving”) and positive (i.e., “thriving”) characteristics. However, not all international students will endorse these features in the same way. Some international students may report a strictly positive experience, others a strictly negative experience, or others both a positive and negative experience. Adjustment is multifaceted and relies on several interacting factors, such as cultural background, host country language abilities, and motivation to acculturate (Chirkov et al., 2007; Chirkov et al., 2008; Fritz, Chin, & DeMarinis, 2008). Considering that international students’ individual profiles will vary across such factors, it can be suggested that so too will the subjective nature of their experiences abroad. As a result, we wanted to explore whether international students’ description of their experience in Canada would thematically differ depending on level of AM. In order to reach this goal, transcripts from the in-person interview were categorized by levels of AM. Following this division, a comparative thematic analysis between the low AM group and the high AM group was conducted. Findings from this analysis demonstrated that a distinct pattern of theme endorsement was associated with each AM group.

In particular, international students in the low AM group more frequently endorsed themes relating to “just surviving”, whereas international students in the high AM group more frequently endorsed themes relating to “thriving”. This pattern of theme endorsement suggests that low levels of AM are associated with reports of a negative experience abroad, whereas high levels of AM are associated with reports of a positive experience abroad. However, given the qualitative nature of this analysis, we could not make generalizations regarding this observation nor speak to whether the variance in international student adjustment was significantly accounted for by differences in AM (Tashakkori & Teddlie, 1998). Addressing this limitation, quantitative
analyses were subsequently conducted, resulting in a mixed-methods approach. Our reasons for mixing were twofold, involving both triangulation of methods and expansion of findings.

**Triangulation of Methods: AM as a Predictor of International Student Adjustment**

Stemming from the observed trend between low AM and negative adjustment as well as between high AM and positive adjustment, our primary reason for mixing was to quantify and generalize our qualitative findings. In order to do so, a series of hierarchical regression analyses were conducted testing the hypotheses that greater AM would predict greater international student adjustment, both overall and across specific adjustment domains (i.e., personal-emotional, academic, social, and institutional attachment).

This hypothesis was confirmed, such that AM was found to significantly predict international student adjustment, over and above what can be accounted for by other individual predictors, such as age, country of origin, gender, academic year, high school GPA, and self-perceived English competence. Ward and Kennedy (1993) have noted a similar relationship between host country identification and sojourner adjustment outcomes, such that weak identification has been found to be associated with poor adjustment outcomes and strong identification has been found to be associated with successful adjustment outcomes. In addition, both region of origin and self-perceived English competence were also found to significantly contribute to predicting international students’ overall adjustment. Within the present study, international students originating from the “Other” region (e.g., Greece, France, Russia, United States) reported greater overall adjustment compared to students originating from China. In contrast, international students originating from the Middle East reported less overall adjustment, compared to students from China. These results echo that of previous studies, such that greater perceived host country language abilities and less perceived cultural distance are associated with
increased adjustment (Arthur & Flynn, 2011; Berry, 1997; Hofstede, 1980; Lewthwaite, 1997; Pedersen et al., 2011).

Interestingly, age, gender, number of years in Canada, and high school GPA did not contribute to predicting international students’ overall adjustment. Yet, within the permanent migrant literature, age, gender, and number of years in the host country tend to be considered moderators of migrant acculturation and adjustment (Berry, 1997). Individual predictors of adjustment may therefore be different for sojourning international students, compared to those of other migrant groups. For example, age may be less predictive of international student adjustment, since international students tend to be within the same emerging adulthood age group (18-30 years old) and therefore share similar ages of host country entry. In addition, similar to Chirkov and colleagues’ (2007) study on international Chinese students, no significant relation was found between number of years in Canada and international student adjustment as well as between number of years in Canada and levels of AM. These findings further validate that AM is unrelated to length of host country exposure and extends Chirkov and colleagues’ (2007) findings from the Chinese student sojourn to the overall international student sojourn.

When identifying possible reasons for why number of years in the host country do not relate to either adjustment or AM, one potential explanation is that temporary migrants may simply not be living in the host country for an adequate duration of time. Given that acculturation is a long-term process, time-limited migrations may render the effects of length of host country exposure less relevant. Pedersen and colleagues (2011) have even gone so far as to suggest that sojourners only adopt a temporary host county commitment, since “full acculturation” would make their eventual home country return more difficult.
Furthermore, beyond predicting overall adjustment, AM was also found to significantly predict international student adjustment across domains of personal-emotional, academic, social, and institutional attachment. However, the strength of this prediction varied, with the total model being most strongly related to predicting international students’ institutional attachment (28.2%) and most weakly related to predicting international students’ personal-emotional adjustment (3.7%). Given that the personal-emotional domain was the only area that was not thematically captured in the “thriving” theme, it is interesting to note the parallel quantitative finding. As previously mentioned, it can be hypothesized that all international students, regardless of level of AM, initially struggle with personal-emotional issues, such as homesickness and loneliness. This is not to say that such issues are irrelevant, but rather that differences in AM may only minimally account for adjustment outcomes that are personal-emotional in nature. In addition, none of the socio-demographic or academic variables included in the model were found to contribute to predicting international student’s personal-emotional adjustment. Perhaps in this domain, proximal ecological predictors, such as social and contextual variables, rather than individual predictors, better explain the variability in international students’ personal-emotional adjustment. In this regard, Chavoshi and Wintre (2013) found that social support, perceived parental reciprocity, and institutional support account for over 30.0% of the variance in international students’ personal-emotional adjustment.

Also interesting to note is the significant role of socio-cultural variables, such as AM, self-perceived English competence, and region of origin, rather than academic variables, such as high school GPA, on international students’ academic adjustment. Given that existing post-secondary admission criteria rely on these pre-academic variables, this finding can be considered counterintuitive. However, when considering that educational practices, such as teaching
techniques and learning processes, are culturally embedded, this discrepancy becomes better understood (Hu, 2002). There is an inherent cultural component to the way knowledge is transmitted and evaluated, such that anthropologists have proposed that for an education practice to be successful, it must be culturally compatible (e.g., Jordan, 1985). As a result, an individual’s academic achievement may differ depending on the cultural compatibility between the pedagogical practices of the home country and that of host country. In this particular study, region of origin was found to significantly predict academic adjustment, such that international students from countries such as the United States, France, and Greece, reported greater academic adjustment compared to international students from China. Hu (2002) has argued that many Western educational practices are actually in direct conflict with Chinese models of teaching and learning. Thus, given that North American and European countries tend to adopt similar educational practices, this result may be an example of the cultural incompatibility between the pedagogical practices of Canada and that of China (Hu, 2002; Leung, Graf, & Lopez-Real, 2006). In addition, perceived language abilities may also play role in academic achievement that supersedes that of past academic success. In a sample of undergraduate international students, Wan, Biggs, and Chapman (1992) found that the stronger the confidence in language skills, the greater the academic adjustment. Finally, our results indicate that over and above self-perceived English competence and region of origin, AM plays a significant role in predicting international students’ academic success. Given that AM reflects a motivation to learn the host country culture and that educational practices reflect a certain cultural specificity, then for international students, AM may also include a willingness to learn the host country academic culture. In this regard, McKinlay, Pattison, and Gross (1996) have suggested that, contrary to other migrant groups, sojourning international students are primarily adapting to the host country’s university culture,
rather than to the host country culture itself. Taken together, our results suggests that individual predictors of international students’ academic success rely more on a combination of perceived host country language abilities, country of origin, and willingness to familiarize oneself with a novel cultural environment, rather than on a student’s history of academic achievement.

In contrast to the more surprising findings from the academic domain, it was less surprising to find that AM, in conjunction with self-perceived English competence and region of origin, significantly contributed to the prediction of international students’ social adjustment. Several studies have demonstrated that greater contact with host nationals is associated with greater overall adjustment and satisfaction, as well as with less academic and social difficulties (Puritt, 1978; Ward & Masogoret, 2004). Given that AM reflects international students’ willingness to engage in host country interactions, our results corroborate previous research by suggesting that increased motivation to interact with host members is associated with increased social adjustment. Furthermore, the role of self-perceived English competence and region of origin has been previously established, such that greater language abilities and less perceived cross-cultural differences have been associated with greater social interactions and reports of social satisfaction (Wan, Chapman, & Biggs, 1992; Yeh & Inose, 2003).

Lastly, parallel to our previous findings, AM, along with self-perceived English competence and region of origin, significantly contributed to predicting international students’ institutional attachment. If international students are in fact primarily acculturating to Canada’s university culture, then it is to be expected that greater motivation to acculturate would be associated with greater attachment to the university institution, given that this is internationals students’ primary context of reception (McKinlay, Pattison, & Gross, 1996). Thus, similar to the way weak host country identification is associated with poor adjustment outcomes in the general
migrant literature, it can be suggested that weak institutional attachment is associated with poor adjustment in international student populations (Chavoshi et al., 2013; Khawaja & Dempsey, 2008; McKinlay et al., 1996; Pedersen et al., 2011; Smith & Khawaja, 2011). In this regard, Chavoshi and Wintre (2013) have demonstrated that international student perceptions of the support and structure of their university explains the largest proportion of variance in international students’ adjustment outcomes, such that more favorable perceptions are associated with greater adjustment. As such, university-related variables (e.g., perception of university resources, support, services, and structure) seem to be of particular importance within international student adjustment (Wintre et al., 2008, 2009). Future research should therefore build on the newly established relationship between AM and institutional attachment by investigating whether AM moderates the relationship between institutional variables (e.g., Student-University Match: Wintre et al., 2009; and Student Perceptions of University Support and Structure: Wintre et al., 2008) and subsequent adjustment outcomes.

Taking together, our findings demonstrate that AM, self-perceived English competence, and region of origin can be considered individual predictors of international student adjustment. Given that the role of perceived language abilities and country of origin have been previously noted in the international student literature, the novel contribution of our study is the significant addition of the role of AM within this area. Considering that AM reflects a willingness to make efforts in participating and becoming functionally fit within the host country environment, it can be suggested that it is because of these efforts that greater AM was associated with greater adjustment (Kim, 2001). However, the resulting paradox is that, compared to permanent migrants, host country integration efforts are not deemed as imperative for temporary migrants (Kim, 2001; Ting-Toomey, 1999). That is, given the time-limited and non-residency related
characteristics of temporary migrations, international students tend to prioritize academic concerns at the expense of integration concerns (Cheung & Yue, 2013). Yet, as our study shows, this belief may be a fallacy, since willingness to acculturate was not only related to international students’ overall success, but also to international students’ primary objective of academic success.

**Expansion of Findings: AM as a Predictor of Future Canadian Residency Intent**

In addition to triangulation of methods, our second reason for mixing was to expand our qualitative findings by exploring the role of AM in international students’ future residency intentions. International students who perceive irreconcilable differences between home and host country have been found to be less likely to pursue permanent migrations, compared to international students who do not perceive such differences (Arthur & Flynn, 2011). Given that our comparative thematic analysis revealed a pattern in which low AM was paired with negative perceptions of Canada and high AM was paired with positive perceptions of Canada, we hypothesized that AM would significantly differentiate between international students who intend on pursuing permanent Canadian residency and those who do not. A binary logistic regression analysis confirmed this hypothesis, such that AM was found to significantly predict international student permanent migration willingness, above and beyond what would be expected from socio-demographic and adjustment variables.

Furthermore, not only did AM significantly predict international students’ permanent migration intentions, but it was the only predictor found to be significant within the complete model. Age, gender, number of years in Canada, self-perceived English competence, region of origin, and total adjustment did not significantly aid in distinguishing between international students who plan on pursuing permanent residency and those who do not. Similar to the present
study, Lu and Schissel (2009) found that number of years in Canada was also not associated with Chinese international students migration intentions. International students’ motivation to acculturate may therefore be at work prior to or during the initial phases of migration, rather than as a consequence of the migration experience itself. However, contrary to the present study, Lu and Schissel (2009) found that age and gender were in fact associated with students’ migration intentions, such that students that were both male and older were more willing to permanently migrate. In addition, Lu and Schissel (2009) demonstrated that for Chinese international students, successful social and cultural adaptation experiences increased permanent migration intentions. In contrast, despite total adjustment being given priority over AM, the present study did not support this finding. These conflicting results may be due to Lu and Schissel’s (2009) study solely focusing on the migration intentions of Chinese international students, whereas the present study focused on that of all international students. In particular, given how some regions of origin in our sample had fewer cases, for this particular analysis, China had to be grouped with East and South Asia, as opposed to representing its own region. Perhaps if we had had a greater number of cases and were able to leave China as it own region, an effect for the role of adjustment for that particular group would have been noted. Given the novelty of this area, further research is needed to clarify the role of both socio-demographic and adjustment variables on international students’ future migration plans.

Nonetheless, this is the first study, to our knowledge, that has explored and supported the predictive validity of international students’ motivation to acculturate on their subsequent migration intentions. Baláz, Williams, and Kollár (2004) have suggested that for some sojourners, temporary migration might actually be a stage in the permanent migration process, rather than a distinct migratory phenomenon. Thus, for some international students, the primary goal may be
to gain residency or citizenship status in the host country and education is deemed as the best route forward in this process. International students who are more inclined to becoming permanent migrants may also be more likely to commit to acclimatizing to the host country culture and endorse greater levels of AM (Baláz, Williams, & Kollár, 2004). It can therefore be suggested that international students in the high AM group might represent a subset of students who are “permanent migrants in-process”, rather than typical sojourners (Kim, 2001).

**Limitations, Implications, and Future Directions**

In sum, the present study demonstrated that international students with greater levels of AM were more likely to positively describe their experience in Canada, to report greater adjustment, and to intend on pursuing permanent Canadian residency. On the contrary, international students with low AM were more likely to describe negatively their experience in Canada, to report poorer adjustment, and to have no intention of pursuing permanent Canadian residency. However, as with all research, the present study is not without limitations.

First, the current study reflected a cross-sectional, rather than a longitudinal design. Even though academic year was used as a control in all analyses, longitudinal research is needed to further clarify the role of AM on international student adjustment and residency intentions. Second, AM was measured after international students had been established in Canada for some time, rather than at the onset of their migration. Despite the lack of relation between time spent in Canada and AM, either in our study or in Chirkov and colleagues’ (2007) study, future research should aim to measure AM at the beginning of the international student sojourn. A longitudinal design would also make it possible to follow students throughout their degree and to further validate the lack of association between AM and length of host country exposure. Third, given the correlational nature of this study, a longitudinal design in which AM would be
measured at the onset of international students’ migrations would also help clarify the directional pathway between AM and international student outcomes. Fourth, the present study did not consider any personality variables within the set of individual predictors (c.f., Wintre & Sugar, 2000). It would be interesting to explore the role of personality characteristics, such as openness to experience, not only on the international student experience, but also on AM. Given that AM reflects a greater willingness to explore a novel cultural context and that individuals with greater openness to experience are more willing to seek out new experiences, it could be suggested that international students who endorse greater openness to experience may also be more likely to endorse greater motivation to acculturate. Fifth, given the cross-sectional nature of this study, the present research specifically explored international students’ intentions to remain in Canada. Further research is warranted in order to evaluate the number of international students who intend to stay in Canada versus the number of international students who actually do stay in Canada. Finally, international students considered in this study were all attending a post-secondary institution in a large, urban, and multicultural university setting. As a result, the majority of international students in our interview sample (72.9%) reported a lack of perceived discrimination, which may have contributed to their levels of AM and subsequent adjustment outcomes. Even though Chirkov and colleagues’ (2007) study found similar levels of AM in a sample of international students attending a smaller, rural, and less diverse university setting (i.e., University of Saskatchewan, Saskatoon, Canada), the impact of university characteristics on AM must be further clarified.

Despite these limitations, the present study also provides several important implications. First, from a methodological standpoint, the current study exemplifies the value of a mixed-methods design, by using initial qualitative findings to inform subsequent quantitative research.
Second, the present study highlights the importance of considering motivational factors within the international student sojourn. The limited studies that have explored the role of motivation have predominantly focused on pre-migration motivations, such as motivations to study abroad, as opposed to post-migration motivations, such as motivation to acculturate (Chirkov et al., 2007; Chirkov et al., 2008; Wintre et al., 2013). Given that international students’ adjustment outcomes can be mostly accounted for by contextual factors, exploring international students’ willingness to engage with their host context is therefore of importance (Chavoshi & Wintre, 2013). Third, the current findings not only validate, but also extend Chirkov and colleagues’ (2007, 2008) research on AM. Thus, beyond replication of findings, this study provides evidence for the role of AM within novel areas of inquiry, such as international student adjustment and residency intent. Lastly, given the limited research on international students’ future migrations plans, this study also adds to the literature by suggesting that motivation to acculturate may be an effective way of distinguishing between international students who envision the transition to permanent residency and those who do not. In light of the newly launched International Education Strategy (Government of Canada, 2014) aiming to increase international student recruitment and post-graduation retention rates, findings from the present research are not only timely, but also highly beneficial.

**Concluding Remarks**

International students make substantial host country contributions that go beyond tuition revenue, such as word-of-mouth recruitment and human capital potential (Arthur & Flynn, 2011). As such, the present study sought to explore and test the role that motivation to acculturate plays on international student adjustment and future residency intent. Both qualitative and quantitative findings supported the role of AM, such that greater motivation to acculturate
was associated with an overall positive experience in Canada, with greater adjustment, and with increased odds of pursuing permanent residency. These findings present key implications for all parties involved in the globalization of education, such as the Canadian government, Canadian post-secondary institutions, and international students themselves.
References


Rudmin, F. W. (2003). "Critical history of the acculturation psychology of assimilation,


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Appendix A: Tables

Table 1
Descriptive Statistics for Socio-Demographic Variables of Sample 1 and Sample 2

<table>
<thead>
<tr>
<th>Socio-Demographic Variable</th>
<th>Sample 1</th>
<th></th>
<th>Sample 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
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<tr>
<td>4 or more</td>
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<td>17.30</td>
</tr>
<tr>
<td>Marital status</td>
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<td></td>
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<tr>
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<td>1.40</td>
<td>204</td>
<td>76.70</td>
</tr>
<tr>
<td>In a relationship</td>
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<td>67.10</td>
<td>50</td>
<td>18.80</td>
</tr>
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</tr>
<tr>
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<td></td>
<td></td>
</tr>
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<tr>
<td>Other</td>
<td>3</td>
<td>4.30</td>
<td>21</td>
<td>7.90</td>
</tr>
<tr>
<td>Latin America</td>
<td>2</td>
<td>2.90</td>
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<td>4.10</td>
</tr>
<tr>
<td>Current academic average</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>50-59%</td>
<td>4</td>
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<td>11</td>
<td>4.10</td>
</tr>
<tr>
<td>60-69%</td>
<td>26</td>
<td>37.10</td>
<td>80</td>
<td>30.10</td>
</tr>
<tr>
<td>70-79%</td>
<td>25</td>
<td>35.70</td>
<td>123</td>
<td>46.20</td>
</tr>
<tr>
<td>80-100%</td>
<td>15</td>
<td>21.40</td>
<td>52</td>
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</tr>
<tr>
<td>Family income</td>
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</tr>
<tr>
<td>Below average</td>
<td>4</td>
<td>5.70</td>
<td>17</td>
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<tr>
<td>Average</td>
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<td>41.40</td>
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<td>42.50</td>
</tr>
<tr>
<td>Above average</td>
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<td>42.90</td>
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<tr>
<td>Well above average</td>
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<td>7.10</td>
</tr>
<tr>
<td>Current place of residence</td>
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<td></td>
</tr>
<tr>
<td>Roommates, off-campus housing</td>
<td>21</td>
<td>30.00</td>
<td>71</td>
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</tr>
<tr>
<td>Alone, off-campus housing</td>
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<tr>
<td>Relative or other family friend</td>
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<td>20.00</td>
<td>47</td>
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</tr>
<tr>
<td>Alone, university residence</td>
<td>10</td>
<td>14.30</td>
<td>57</td>
<td>21.40</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>10.00</td>
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<td>7.10</td>
</tr>
<tr>
<td>Roommates, university residence</td>
<td>2</td>
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<td>6.00</td>
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<tr>
<td>Parent(s)</td>
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Note. Sample 1 N = 70; Sample 2 N = 266.
<table>
<thead>
<tr>
<th>Region</th>
<th>Countries Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>China</td>
</tr>
<tr>
<td>South Asia</td>
<td>India, Pakistan, Sri Lanka, Bangladesh</td>
</tr>
<tr>
<td>East Asia</td>
<td>Thailand, Vietnam, Japan, South Korea, Indonesia, Singapore, Philippines, Malaysia, Cambodia</td>
</tr>
<tr>
<td>Caribbean</td>
<td>Bahamas, Jamaica, Cayman Islands, Barbados, St. Lucia, Trinidad and Tobago, St. Vincent</td>
</tr>
<tr>
<td>Africa</td>
<td>Kenya, Nigeria, Tanzania, Ghana, Egypt, Ethiopia, Malawi, Swaziland, Democratic Republic of Congo</td>
</tr>
<tr>
<td>Middle East</td>
<td>Syria, Lebanon, Turkey, Yemen, United Arab Emirates, Kuwait, Iran, Saudi Arabia, Qatar</td>
</tr>
<tr>
<td>Latin America</td>
<td>Chile, Colombia, Venezuela, Peru, Brazil, Mexico, Nicaragua</td>
</tr>
<tr>
<td>Other</td>
<td>Denmark, Greece, France, Italy, Kazakhstan, Russia, Croatia, Mauritius, United States of America</td>
</tr>
</tbody>
</table>

*Note. Total number of countries = 60*
### Table 3

*Description and Excerpt Examples of Organizing Themes and Basic Components within “Just Surviving”*

<table>
<thead>
<tr>
<th>Themes and Basic Components</th>
<th>Description</th>
<th>Example Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) A face in the crowd</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Homesick and lonely</td>
<td>Loneliness; feelings of social isolation; lack of social support; nostalgic about things and people in home country; feelings of sadness related to being away</td>
<td>“Basically I don’t feel like I belong here. I feel yeah... lost in the crowd and stuff. I haven’t really found my place yet.” (Female, 21, Kenya)</td>
</tr>
<tr>
<td><strong>2) Academic challenges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Disappointment in education quality</td>
<td>Disappointment in overall education quality; does not match fees</td>
<td>“I’m paying all this money to come here, really you [the professor] should drop the attitude - it’s not needed”. (Female, 19, Barbados)</td>
</tr>
<tr>
<td>b. Struggling to keep up</td>
<td>Education system is different; competitive environment; workload is overwhelming; difficulty getting good grades; falling behind</td>
<td>“In Canada, there is a higher standard of education. Like I have to study more to keep up with the grades” (Male, 19, Nigeria)</td>
</tr>
<tr>
<td>c. Academics in English</td>
<td>Having to read, write, speak, and/or understand academic material in English is an additional challenge.</td>
<td>“Earliest problem was for academic - listening problem. I can read stuff in textbook or blackboard, on the slides. But I always have problem in listening [...]I always feel they speak too quickly or I only catch a few words, a few simple words. I don’t understand almost 50 percent of what professor says during lecture. That’s a big problem.” (Male, 23, China)</td>
</tr>
</tbody>
</table>
3) Cross-cultural challenges

a. Learning the cultural protocol

Difficulties learning social norms and prescriptions; having to discern between appropriate and inappropriate behaviours and attitudes; figuring out the local customs

“The way people express himself or herself. For example first I come to Canada and people ask me how you doing, I don’t know how to answer. In China we don’t ask that.” (Female, 24, China)

4) Negative university perception

a. Confused and unsupported

University system is confusing; lack of assistance and/or guidance; absence of support

“It’s pretty hard to make an appointment with an advisor [...] and I don’t think it really helps you. They only know your G.P.A, your academic background and they don’t really listen to your problem.” (Male, 23, China)

b. Bad fit

Environmental conditions (e.g., classrooms, student center) are unfit; resources do not match needs

“It is not only the education that matters, but it is the environment that matters [...] If I pay 20,000 a year, I expect something better.” (Male, 25, Pakistan)

5) Making friends is hard

a. Domestic students are closed off

Domestic students are uninterested in socializing with international students

“...We feel that local students aren’t that open to us [...] I want to know the culture and the lifestyle and even the history but I would have to make local friends to do that.” (Female, 21, China)

b. Canadians are too different

Social activities and preferences are different; “partying” lifestyle is incompatible; cultural references are foreign

“They usually party from Thursday to Sunday and I couldn’t really get studying done or sleep [...] so I felt awkward and they drink and dance and I’m not used to it, its not the usual stuff I do at home” (Female, 21, China)

c. Personal limitations

Difficulties with having to be proactive and approach others (e.g., shy, scared, intimidated)

“I didn’t know how to approach people and it was a kind of scary experience.” (Female, 21, Kenya)
d. Language barrier

Not being able to speak the language fluently is challenging; difficulties in communication lead to difficulties in making friendships

“*I think it’s the English problems and they cause that I can’t talk with them very well with speaking and with listening and maybe they say something very funny or we talk about something I don’t know and I can’t join with them. It was harder to make friends.*” (Male, 21, China)

6) Struggling with self-reliance

a. Financial challenges

Living abroad is expensive; employment eligibility for international students is a barrier; generating income is difficult

“*Fees. It is a lot of money. When you don’t pay them all at once, you get interest that accumulates…getting a job is so hard.*” (Male, 19, Nigeria)

b. Should have known better

Difficulties with independence/autonomy; was not developmentally ready

“I don’t know… I was pretty young. I was like 16 and I had culture shock, I guess that is what it can be called […] I just expected things to happen, but they never do […] I was just not ready to maybe leave yet.” (Female, 21, Kenya)

7) Canada as negative

a. Not that great

Canada does not live up to its reputation: it has bad food; bad weather; not a safe environment; there are gender/racial/ethnic stereotypes and segregation; lack of sense of community

“I have heard of various safety issues. There are murders, rapes, there are bomb threats…like this is no better than the country that I came from” (Male, 25, Pakistan)

b. Strange customs and values

Local customs, values and norms perceived as foreign and incompatible; sense of unease around Canadian practices

“I knew these things were gonna happen, but of course, you know, there will be different things, like gays and lesbians which are not so popular in Singapore, not so open like here, which is very open. It was a bit of a – I’m not saying like awkward… it was a bit uneasy. Because when you’re living in a country that these things are not seen at all, it becomes, like, a bit not normal.” (Male, 22, Singapore)
<table>
<thead>
<tr>
<th>Themes and Basic Components</th>
<th>Description</th>
<th>Example Excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Positive university perception</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Feeling guided and supported</td>
<td>University provides proper support and guidance; access to services; resources match needs</td>
<td>“[…] services are great for international students especially, that’s one thing I really cherish in the university when there are people at hand, offices and places that facilitate the transition of coming in and giving resources around the city and around the campus.” (Female, 23, Syria)</td>
</tr>
<tr>
<td><strong>2) Worth the growing pains</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. No regrets</td>
<td>Experience has lived up to and/or surpassed expectations; studying abroad is a worthwhile endeavor; satisfied with decision</td>
<td>“I mean there’s always an apprehension when you move to somewhere else, everything is new […] So I had a bit of apprehension but as time goes by it ended up being great experience.” (Male, 19, Mauritius)</td>
</tr>
<tr>
<td>b. Master of your destiny</td>
<td>Power to influence and direct personal adjustment; responsible for outcomes</td>
<td>“And I was really involved […] I was just doing everything: I was asking questions, I was meeting professors after class….and I just…I don’t know... I’ve learned how to live in Canada, and what is acceptable and what is not.” (Female, 24, Kazakhstan)</td>
</tr>
<tr>
<td>c. Becoming an adult</td>
<td>Maturation; independence; autonomy</td>
<td>“The other goal was to try to be very independent because in China I was the only child and my parents take care of everything, so when I live here I have to find a house by myself and do groceries by myself and do everything that helps you grow up.” (Female, 21, China)</td>
</tr>
</tbody>
</table>
3) Making friends is easy
   a. Be proactive
   Being active facilitates social connections; must take-charge to make friendships; the more engaged you are, the easier it is
   “I made a lot of friends in my first year because of participating in everything and everything [...] I very much learned that there are these wonderful people around me and I am so proud to be their friend and so on. And yeah, I mean it so easy to make friends here, so easy to meet people.” (Female, 23, Syria)

4) Academic satisfaction
   a. Progress over time
   Academics get easier with time; hard work pays off
   “I came at a point where it had to be a priority. So I made sure I got into the right courses, took all the right steps….I adjusted. I had my schedule, I had time management when it comes to that. That’s been great, I’m back on track.” (Female, 21, Kenya)

   b. Academic success
   Good grades; satisfied with academic performance
   “I’ve had the most amazing experience. I love York so much, I’ve learned so much, it’s been great, I’ve had some amazing professors, and I am very much satisfied with the academic side of everything.” (Female, 24, Kazakhstan)

5) Cross-cultural adjustment
   a. Diversity facilitates integration
   There is a place for everyone; diversity makes it more inclusive
   “It’s such a diverse community here, students from everywhere ...it was much much easier.” (Male, 22, Singapore)

   b. Same language makes it easier
   Feeling competent in English makes the transition smoother
   “I think I’ve adjusted pretty well. It might be because it’s the same language. I’m guessing maybe that has helped.” (Female, 23, Syria)
6) **Canada as positive**

   a. Good quality of life
   
   Idea that Canada is tolerant, respectful, and inclusive because of its racial and ethnic diversity—everyone has a place

   b. Multiculturalism breeds tolerance

   Idea that Canada is tolerant and values diversity—everyone has a place

---

“Okay, so first of all as I’ve said, everything is for people here—especially in university—it is just really I can feel it, and I can feel the difference. Second, this probably should have been first, almost no corruption, if something is written down as a law, it is going to be upheld, and I should not be worried [...]. People are very friendly. It is just very nice. I don’t know, I feel like people are quite positive and yeah, they know they are going to have some future.” (Female, 24, Kazakhstan)

“The biggest difference is I think about openness, because of the diversity here, because South Korea people think is very weird, or strange, when people are behaving in some specific way which is considered abnormal or strange thing. But here there are a lot of people from different background and anyway for me, it seems like it is more free to act or free to be myself”. (Male, 22, South Korea)
<table>
<thead>
<tr>
<th>Variables</th>
<th>( M )</th>
<th>( SD )</th>
<th>Min</th>
<th>Max</th>
<th>Range</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>( N )</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
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<td>2.31</td>
<td>19</td>
<td>28</td>
<td>9</td>
<td>.31</td>
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<td>GPA</td>
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<tr>
<td>Self-Perceived English Competence</td>
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<td>15</td>
<td>9</td>
<td>-1.00</td>
<td>0.47</td>
<td>70</td>
</tr>
<tr>
<td>SACQ Total</td>
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<td>67.72</td>
<td>269</td>
<td>534</td>
<td>265</td>
<td>.20</td>
<td>-.88</td>
<td>70</td>
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<tr>
<td>SACQ Personal-Emotional Subscale</td>
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<td>21.47</td>
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<td>129</td>
<td>94</td>
<td>0.06</td>
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<tr>
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<td>70</td>
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<tr>
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<tr>
<td>SACQ Institutional Attachment Subscale</td>
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<td>AMS</td>
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<td>75</td>
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<td>-0.63</td>
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### Table 6
Descriptive Statistics for all Variables of Interest for Sample 2

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<th>Max</th>
<th>Range</th>
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<tbody>
<tr>
<td>Age</td>
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<tr>
<td>GPA</td>
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<td>4</td>
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<td>-.52</td>
<td>266</td>
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<tr>
<td>Self-Perceived English Competence</td>
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<td>3</td>
<td>15</td>
<td>12</td>
<td>-.78</td>
<td>.12</td>
<td>265</td>
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<td>SACQ Total</td>
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<td>220</td>
<td>571</td>
<td>351</td>
<td>.39</td>
<td>-.18</td>
<td>266</td>
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<td>SACQ Personal-Emotional Subscale</td>
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<td>21.21</td>
<td>23</td>
<td>133</td>
<td>80</td>
<td>.13</td>
<td>-.41</td>
<td>266</td>
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<tr>
<td>SACQ Social Subscale</td>
<td>105.95</td>
<td>23.02</td>
<td>50</td>
<td>175</td>
<td>125</td>
<td>.09</td>
<td>-.09</td>
<td>265</td>
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<tr>
<td>SACQ Academic Subscale</td>
<td>136.41</td>
<td>25.21</td>
<td>52</td>
<td>208</td>
<td>156</td>
<td>.24</td>
<td>.17</td>
<td>266</td>
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<tr>
<td>SACQ Institutional Attachment Subscale</td>
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<td>135</td>
<td>90</td>
<td>.22</td>
<td>-.62</td>
<td>265</td>
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<tr>
<td>AMS</td>
<td>57.68</td>
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<td>75</td>
<td>43</td>
<td>-.39</td>
<td>-.66</td>
<td>266</td>
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</tbody>
</table>
### Table 7

**Pearson Correlations of SACQ Total, SACQ Subscales, and Predictor Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
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<td>1. Age</td>
<td>1.00</td>
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<td>.41**</td>
<td>.14*</td>
<td>-.09</td>
<td>.07</td>
<td>.07</td>
<td>.01</td>
<td>.03</td>
<td>.10</td>
<td>.11</td>
</tr>
<tr>
<td>2. Gender (1=M, 2=F)</td>
<td>1.00</td>
<td>.03</td>
<td>-.04</td>
<td>.13*</td>
<td>.09</td>
<td>.04</td>
<td>-.01</td>
<td>-.00</td>
<td>.08</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>3. Academic Year</td>
<td>1.00</td>
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<td>.07</td>
<td>-.04</td>
<td>.10</td>
<td>.10</td>
<td>.07</td>
<td>.07</td>
<td>.10</td>
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<tr>
<td>4. Self-Perceived English Competence</td>
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<td>.12</td>
<td>.33**</td>
<td>.10</td>
<td>.31**</td>
<td>.33**</td>
<td>.35**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. High school GPA</td>
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<td>.08</td>
<td>.03</td>
<td>.05</td>
<td>.13*</td>
<td>.05</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. AMS</td>
<td>1.00</td>
<td>.30**</td>
<td>.15*</td>
<td>.23**</td>
<td>.35**</td>
<td>.42**</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>7. SACQ Total</td>
<td>1.00</td>
<td>.76**</td>
<td>.80**</td>
<td>.87**</td>
<td>.84**</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8. SACQ Personal-Emotional</td>
<td>1.00</td>
<td>.42**</td>
<td>.56**</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. SACQ Social</td>
<td>1.00</td>
<td>.53**</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10. SACQ Academic</td>
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<td>.67**</td>
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<td></td>
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<td></td>
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<tr>
<td>11. SACQ Institutional Attachment</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1.00</td>
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</tbody>
</table>

*Note: *p < .05, **p < .001.*
Table 8
Hierarchical Regression Analysis on SACQ Total Scores

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Note: Adjusted $R^2 = .14$ for Block 1 ($p < .001$), Adjusted $R^2 = .20$ for Block 2 ($p < .001$); *$p < .05$, **$p < .001$. 

Table 9
Hierarchical Regression Analysis on SACQ Personal-Emotional Subscale Scores

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Block 2: Addition of AMS

| Age | -.04 | .04  | -.06 | -.94 |
| Gender (1=M, 2=F) | -.15 | .19  | -.05 | -.79 |
| Region of origin (relative to China) |    |      |     |     |
| Caribbean                           | .51 | .37  | .10 | 1.39|
| South Asia                          | -.26| .30  | -.07| -.87|
| East Asia                           | -.12| .28  | -.03| -.41|
| Middle East                         | -.55| .46  | -.08| -1.18|
| Africa                              | .34 | .39  | .06 | .87 |
| Latin America                       | .58 | .47  | .08 | 1.22|
| Other                               | .56 | .34  | .11 | 1.61|
| Academic year (relative to Year 1) |    |      |     |     |
| Year 2                              | .28 | .24  | .09 | 1.19|
| Year 3                              | .30 | .25  | .09 | 1.19|
| Year 4                              | .51 | .30  | .14 | 1.70|
| High school GPA                     | .00 | .01  | .00 | -.01|
| Self-perceived English competence   | .01 | .04  | .02 | .30 |
| AMS                                 | .02 | .01  | .15*| 2.43*|

Note: Adjusted $R^2 = .018$ for Block 1 ($p > .05$), Adjusted $R^2 = .038$ for Block 2 ($p < .05$); *$p < .05$, **$p < .001$
Table 10
Hierarchical Regression Analysis on SACQ Social Subscale Scores

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Block 2: Addition of AM

| Age                                  | -.28    | .66     | -.03   | -.43   |
| Gender (1=M, 2=F)                     | -1.69   | 2.91    | -.04   | -.58   |
| Region of origin (relative to China) |         |         |        |        |
| Caribbean                            | -8.29   | 5.56    | -.10   | -1.49  |
| South Asia                           | -8.52   | 4.50    | -.13   | -1.89  |
| East Asia                            | -10.49  | 4.27    | -.16*  | -2.46* |
| Middle East                          | -23.84  | 7.01    | -.21*  | -3.40* |
| Africa                               | .45     | 5.86    | .00    | .08    |
| Latin America                        | -15.66  | 7.13    | -.13*  | -2.20* |
| Other                                | 2.59    | 5.19    | .03    | .50    |
| Academic year (relative to Year 1)   |         |         |        |        |
| Year 2                               | .69     | 3.56    | .01    | .19    |
| Year 3                               | 5.13    | 3.76    | .10    | 1.36   |
| Year 4                               | 1.79    | 4.57    | .03    | .39    |
| High school GPA                      | .00     | .14     | .00    | -.03   |
| Self-perceived English competence    | 2.93    | .61     | .34**  | 4.83** |
| AMS                                  | .50     | .15     | .20**  | 3.45** |

Note: Adjusted $R^2 = .137$ for Block 1 ($p < .001$), Adjusted $R^2 = .172$ for Block 2 ($p < .001$); *$p < .05$, **$p < .001$. 
Table 11
Hierarchical Regression Analysis on SACQ Academic Subscale Scores

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Block 2: Addition of AM

| Age                                | .96 | .72 | .08 | 1.34 |
| Gender (1=M, 2=F)                  | 2.78| 3.19| .05 | .87 |
| Region of origin (relative to China)|     |      |     |     |
| Caribbean                          | -3.03| 6.10 | -.03| -.50|
| South Asia                         | -4.55| 4.94 | -.06| -.92|
| East Asia                          | -3.21| 4.68 | -.04| -.69|
| Middle East                        | -12.59| 7.69 | -.10| -1.64|
| Africa                             | 4.72 | 6.43 | .05 | .73 |
| Latin America                      | 1.73 | 7.83 | .01 | .22 |
| Other                              | 12.54| 5.69 | .15 *| 2.20 *|
| Academic year (relative to Year 1) |     |      |     |     |
| Year 2                             | 1.77 | 3.90 | .03 | .45 |
| Year 3                             | 4.12 | 4.13 | .07 | 1.00|
| Year 4                             | -3.73| 5.01 | -.06| -.74|
| High school GPA                    | .17  | .16  | .06 | 1.05|
| Self-perceived English competence  | 2.79 | .67  | .30 **| 4.19 **|
| AMS                                | .48  | .16  | .18 **| 3.03 **|

Note: Adjusted $R^2 = .141$ for Block 1 ($p > .001$), Adjusted $R^2 = .168$ for Block 2 ($p = .003$); *$p < .05$, **$p < .001$. **
Table 12

Hierarchical Regression Analysis on SACQ Institutional Attachment Subscale Scores

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<td>2.02</td>
<td>.04</td>
<td>.66</td>
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<td></td>
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<tr>
<td>Caribbean</td>
<td>.74</td>
<td>3.86</td>
<td>.01</td>
<td>.19</td>
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<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>East Asia</td>
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<td>-.06</td>
<td>-.98</td>
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<tr>
<td>Middle East</td>
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<td>4.87</td>
<td>-.11</td>
<td>-1.91</td>
</tr>
<tr>
<td>Africa</td>
<td>6.92</td>
<td>4.07</td>
<td>.10</td>
<td>1.70</td>
</tr>
<tr>
<td>Latin America</td>
<td>.89</td>
<td>4.96</td>
<td>.01</td>
<td>.18</td>
</tr>
<tr>
<td>Other</td>
<td>8.22</td>
<td>3.60</td>
<td>.14*</td>
<td>2.28*</td>
</tr>
<tr>
<td>Academic year (relative to Year 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
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<td>2.47</td>
<td>.05</td>
<td>.70</td>
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<td>Year 3</td>
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<td>2.61</td>
<td>.09</td>
<td>1.30</td>
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<td>Year 4</td>
<td>.28</td>
<td>3.17</td>
<td>.01</td>
<td>.09</td>
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<tr>
<td>High school GPA</td>
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<td>.10</td>
<td>.00</td>
<td>-.07</td>
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<tr>
<td>Self-perceived English competence</td>
<td>1.63</td>
<td>.42</td>
<td>.26**</td>
<td>3.87**</td>
</tr>
<tr>
<td>AMS</td>
<td>.66</td>
<td>.10</td>
<td>.36**</td>
<td>6.57**</td>
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</table>

Note: Adjusted $R^2 = .158$ for Block 1 ($p > .001$), Adjusted $R^2 = .280$ for Block 2 ($p < .001$); *$p < .05$, **$p < .001$. 
Table 13
Hierarchical Binary Logistic Regression Analysis on Future Residency Intent

<table>
<thead>
<tr>
<th></th>
<th>B(SE)</th>
<th>Odds ratio</th>
<th>95% CI</th>
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<tr>
<td><strong>Block 1: Socio-demographic variables</strong></td>
<td></td>
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<tr>
<td>Age</td>
<td>.20 (.13)</td>
<td>1.22</td>
<td>.96 - 1.56</td>
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<tr>
<td>Gender (1=M, 2=F)</td>
<td>.28 (.60)</td>
<td>1.32</td>
<td>.40 - 4.31</td>
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<tr>
<td>Number of years in Canada</td>
<td>.06 (.13)</td>
<td>1.06</td>
<td>.83 – 1.37</td>
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<tr>
<td>Region of origin (relative to China, East Asia, and South Asia)</td>
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<td></td>
</tr>
<tr>
<td>Caribbean, Latin America, &amp; Other</td>
<td>.38 (.74)</td>
<td>1.47</td>
<td>.35 – 6.26</td>
</tr>
<tr>
<td>Middle East and Africa</td>
<td>.45 (.73)</td>
<td>1.57</td>
<td>.38 – 6.54</td>
</tr>
<tr>
<td>Self-perceived English competence</td>
<td>.23 (.13)</td>
<td>1.26</td>
<td>.97 – 1.62</td>
</tr>
<tr>
<td><strong>Block 2: Addition of Adjustment</strong></td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>.21 (.13)</td>
<td>2.62</td>
<td>.96 - 1.57</td>
</tr>
<tr>
<td>Gender (1=M, 2=F)</td>
<td>.25 (.61)</td>
<td>.17</td>
<td>.39 - 4.24</td>
</tr>
<tr>
<td>Number of years in Canada</td>
<td>-.06 (.13)</td>
<td>.18</td>
<td>.82 – 1.37</td>
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<tr>
<td>Region of origin (relative to China, East Asia, and South Asia)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Caribbean, Latin America, Other</td>
<td>.40 (.74)</td>
<td>.29</td>
<td>.35 – 6.36</td>
</tr>
<tr>
<td>Middle East and Africa</td>
<td>.45 (.73)</td>
<td>.38</td>
<td>.37 – 6.60</td>
</tr>
<tr>
<td>Self-perceived English competence</td>
<td>.24 (.13)</td>
<td>3.21</td>
<td>.98 – 1.65</td>
</tr>
<tr>
<td>SACQ Total</td>
<td>-.00 (.00)</td>
<td>.11</td>
<td>.99 – 1.01</td>
</tr>
<tr>
<td><strong>Block 3: Addition of AM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.21 (.14)</td>
<td>1.23</td>
<td>.93 – 1.61</td>
</tr>
<tr>
<td>Gender (1=M, 2=F)</td>
<td>.48 (.69)</td>
<td>1.61</td>
<td>.42 – 6.25</td>
</tr>
<tr>
<td>Number of years in Canada</td>
<td>.13 (.16)</td>
<td>1.14</td>
<td>.84 – 1.55</td>
</tr>
<tr>
<td>Region of origin (relative to China, East Asia, and South Asia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caribbean, Latin America, Other</td>
<td>.17 (.89)</td>
<td>1.19</td>
<td>.21 – 6.89</td>
</tr>
<tr>
<td>Middle East and Africa</td>
<td>.51 (.85)</td>
<td>1.67</td>
<td>.32 – 8.77</td>
</tr>
<tr>
<td>Self-perceived English competence</td>
<td>.19 (.16)</td>
<td>1.22</td>
<td>.89 – 1.66</td>
</tr>
<tr>
<td>SACQ Total</td>
<td>-.01 (.01)</td>
<td>.99</td>
<td>.98 – 1.00</td>
</tr>
<tr>
<td>AMS</td>
<td>.18 (.06) **</td>
<td>1.20**</td>
<td>1.07 – 1.33</td>
</tr>
</tbody>
</table>

*Note:* Nagelkerke $R^2 = .155$ for Block 1 ($p > .05$), Nagelkerke $R^2 = .157$ for Block 2 ($p > .05$), Nagelkerke $R^2 = .431$ for Block 3 ($p < .001$); **$p < .001$
Appendix B: Figures

Figure 1. Thematic map of global theme “Just Surviving”. Percentages represent theme endorsement resulting from general thematic analysis.
Figure 2. Thematic map of global theme “Thriving”. Percentages represent theme endorsement resulting from general thematic analysis.
A Face in the Crowd

Cross-Cultural Challenges

Learning the cultural protocol

Academic Challenges

Negative University Perception

Overall theme  Expected quality  Struggling to keep up  Academics in English

Overall theme  Confused and unsupported  Bad fit
Figure 3. Comparison of organizing theme and basic component frequencies in “Just Surviving” between low AM and high AM. In each chart, the title represents the name of the organizing theme.
Positive University Perception

- Feeling supported and guided

Worth the Growing Pains

- Overall theme
- No regrets
- Master of your destiny
- Becoming an adult

Making Friends is Easy

- Be proactive

Academic Satisfaction

- Overall theme
- Progress over time
- Academic success
Figure 4. Comparison of organizing theme and basic component frequencies in “Thriving” between low AM and high AM. In each chart, the title represents the name of the organizing theme.
Appendix C: Online Questionnaire

**International Student Online Questionnaire**

Thank you for your involvement in our study.

It will take less than an hour to complete this questionnaire. Your participation will help York University provide better service to international students by enabling us to learn more about international students to better understand the challenges they face and their unique circumstances.

Your participation in our research is completely voluntary; you may withdraw at any time or omit any questions, although it is most helpful to us if you complete the entire survey. Your responses will be kept completely confidential. Your name will not be used or associated with any of the data collected. If we do use direct quotations in any related publications all identifying information will be removed. We do not foresee any risks as a result of your participation in this component of the study. Data will be stored in a secure database on a password protected computer for the duration for the study after which it will be destroyed.

You will be compensated $10 for your participation in this part of the study. Your decision to stop participating, or to refuse to answer particular questions, will not affect the remuneration that was advertised, your relationship with the researchers, York University, or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

This research has been reviewed and approved for compliance to research ethics protocols by the Human Participants Review Subcommittee (HRPC) of York University. Should you have any questions, you can contact the Psychology Graduate Program Office at 416-736-5290 or the Office of Research Ethics, 309 York Lanes, at phone (416) 736-5914. If you have any questions about the questionnaire or the research project, please contact Saeid Chavoshi (chavoshi@yorku.ca) or Dr. Maxine Wintre (mwintre@yorku.ca). Once again, thank you for your co-operation with our research project.

Age  __________

Gender  Male  Female

Country of Origin  __________

Major  __________

Academic Year  ___1st  _____  2nd  _____  3rd  _____  4th
How long have you been in Canada?____________

Month and Year of Arrival _____________

Using the scale below rate the following statements

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all because of this reason</td>
<td>Somewhat because of this reason</td>
<td>Completely because of this reason</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

__ I decided to study abroad in Canada because I thought I would enjoy it.
__ I decided to study abroad in Canada because I wanted to avoid the shame and guilt of not doing this.
__ I decided to study abroad in Canada because this is what I really want to do with my life.
__ I decided to study abroad in Canada because I expected to get respect and recognition from others for doing so.
__ I decided to study abroad in Canada so that other people would approve of me.
__ I decided to study abroad in Canada because I thought it would be an exciting thing to do.
__ I decided to study abroad in Canada because others (relatives and friends) forced me to do this.
__ I decided to study abroad in Canada because it was one of my life goals.
__ I decided to study abroad in Canada because I would be criticized for not doing so.
__ I decided to study abroad in Canada because I would have gotten into trouble if I did not.

Have you been in any other academic programs prior to York?  
   a. [If Yes] What was the program and for how long?  

Did you take any academic preparation course at York?  
   a. [If Yes] What was the program and for how long?  
   b. Was it mandatory?  

Did you take any language preparation courses?  
   a. [If Yes] What was the program and for how long?  
   b. Was it mandatory?  

Based on the scale above, how satisfied are you with your level of English?___

Did you do the TOEFL? No Yes  
   If yes, what was your score? _______
   How long ago did you take the test?_________
Did you do the IELTS? No Yes
   If yes, what was your score? ______
   How long ago did you take the test? ________

Select the option below that best reflects your academic performance in terms of your average grade:
   50 – 59%
   60 – 69%
   70 – 79%
   80 – 100%

Select the option that best describes your current marital status:
   Single
   Married / Common-law
   Other: ______

In what country was your father born? _____________________

In what country was your mother born? ____________________

Family Composition: Are your parents:
   living together
   divorced/separated
   adoptive/foster
   mother a widow
   father a widower
   both deceased

Financially, do you consider your family to be:
   Below average income
   Average income
   Above average income
   Well above average income

What is the highest level of education that your parents completed? (Check the appropriate one for each parent)

Mother  Father
   less than high school
   some high school
   completed high school
   some college or university
   completed college program
   completed undergraduate university degree
   some post graduate training
Does your mother work outside of the home?  Not at all  Part Time  Full Time

Does your father work outside of the home?  Not at all  Part Time  Full Time

With whom are you living while you attend university?
- my parent(s) in their home
- a relative or other family friend
- on my own in off-campus housing
- on my own in a university residence
- a university-assigned roommate(s) in a university residence
- other students in a shared apartment / house
- other: ______

Use the following scale to complete the questions below:

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>almost never</td>
<td>sometimes</td>
<td>fairly often</td>
<td>very often</td>
</tr>
</tbody>
</table>

During your process of deciding to attend York University how often did you discuss the following issues with your parents?
- a. University life___
- b. Classes___
- c. Social life at University___
- d. Your living arrangements ___
- e. Finances___

During your process of deciding to attend York University how often did you discuss the following issues with your friends?
- a. University life___
- b. Classes___
- c. Social life at University___
- d. Your living arrangements ___
- e. Finances___

How important is it to you to graduate with your current major?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unimportant</td>
<td>unimportant</td>
<td>don’t care</td>
<td>important</td>
<td>very important</td>
</tr>
</tbody>
</table>

How important is it to you to complete your degree at York?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unimportant</td>
<td>unimportant</td>
<td>don’t care</td>
<td>important</td>
<td>very important</td>
</tr>
</tbody>
</table>
Has any other member of your family studied abroad?  No  Yes
  • [If yes] Which family member
    o Where?

How satisfied are you with your experience at York in General?

1  2  3  4  5
Extremely dissatisfied  Dissatisfied  Neither satisfied nor dissatisfied  Satisfied  Extremely Satisfied

Comments: ________________

How satisfied are you with your academic experience at York?

1  2  3  4  5
Extremely dissatisfied  Dissatisfied  Neither satisfied nor dissatisfied  Satisfied  Extremely Satisfied

Comments: ________________

How satisfied are you with your social experience at York?

1  2  3  4  5
Extremely dissatisfied  Dissatisfied  Neither satisfied nor dissatisfied  Satisfied  Extremely Satisfied

Comments: ________________

How satisfied are you with the services and support provided by York International?

1  2  3  4  5
Extremely dissatisfied  Dissatisfied  Neither satisfied nor dissatisfied  Satisfied  Extremely Satisfied

Comments: ________________

**Relationships with Others**

In this section, you will find a number of statements relating to your relationships with those around you. Read each carefully and rate using the following scale.

-4  -3  -2  -1  0  +1  +2  +3  +4
very strongly strongly moderately slightly neither agree slightly moderately strongly very
disagree disagree disagree disagree nor disagree agree agree agree
1. _____ There are people I can depend on to help me if I really need it.
R 2. _____ I feel that I do not have any close personal relationships with other people.
R 3. _____ There is no one I can turn to for guidance in times of stress.
4. _____ There are people who depend on me for help.
5. _____ There are people who enjoy the same social activities I do.
R 6. _____ Other people do not view me as competent.
7. _____ I feel personally responsible for the well-being of another person.
8. _____ I feel part of a group of people who share my attitudes and beliefs.
R 9. _____ I do not think other people respect my skills and abilities.
10. _____ If something went wrong, no one would come to my assistance.
11. _____ I have close relationships that provide me with a sense of emotional security and well-being.
12. _____ There is someone I could talk to about important decisions in my life.
13. _____ I have relationships where my competence and skill are recognized.
R 14. _____ There is no one who shares my interests and concerns.
R 15. _____ There is no one who really relies on me for their well-being.
16. _____ There is a trustworthy person I could turn to for advice if I were having problems.
17. _____ I feel a strong emotional bond with at least one other person.
R 18. _____ There is no one I can depend on for aid if I really need it.
R 19. _____ There is no one I feel comfortable talking about problems with.
20. _____ There are people who admire my talents and abilities.
R 21. _____ I lack a feeling of intimacy with another person.
R 22. _____ There is no one who likes to do the things I do.
23. _____ There are people I can count on in an emergency.
R 24. _____ No one needs me to care for them any more.

**Students’ Perception of University Support and Structure**

Please use the following scale to indicate your agreement with each statement, as it applies to this university.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>-4</td>
<td>very strongly disagree</td>
</tr>
<tr>
<td>-3</td>
<td>strongly disagree</td>
</tr>
<tr>
<td>-2</td>
<td>moderately disagree</td>
</tr>
<tr>
<td>-1</td>
<td>slightly disagree</td>
</tr>
<tr>
<td>0</td>
<td>neither agree nor disagree</td>
</tr>
<tr>
<td>+1</td>
<td>slightly agree</td>
</tr>
<tr>
<td>+2</td>
<td>moderately agree</td>
</tr>
<tr>
<td>+3</td>
<td>strongly agree</td>
</tr>
<tr>
<td>+4</td>
<td>very strongly agree</td>
</tr>
</tbody>
</table>

1. _____ Students are informed during student orientation about help available to them if they are having any emotional or adjustment problems.
2. _____ The degree and program requirements in the university calendar are very clear.
3. _____ It’s easy to make friends.
4. _____ Professors in classes make it clear what students are expected to do in order to get a good grade on assignments, papers and tests.
5. _____ If a student needed help for an emotional problem, it would be easy to find a service on campus to help them.
6. _____ Professors aren’t really clear about what they expect of students.
7. _____ There are lots of confusing rules that make registration and course selection difficult.
8. _____ The professors don’t really care about their students.
9. _____ There aren’t many places for students to get together and talk.
10. _____ If students are having difficulty with academic course work, they can easily talk to professors or their teaching assistants.
11. _____ Professors at this school don’t really try to make you think.
12. _____ Professors get tests and assignments back to students in good time.
13. _____ It is hard for students to get advice in selecting courses or deciding on a program of study.
14. _____ Professors and teaching assistants in classes are helpful and encouraging.
15. _____ Academic policies on cheating and copying are made clear to students.
16. _____ Professors and teaching assistants don’t give very much feedback on tests, exams or papers.
17. _____ There’s very little opportunity for students to have direct one-to-one contact with a professor.
18. _____ Professors emphasize reasoned questions and critical appraisal of what they present in class.
19. _____ Faculty and teaching assistants post office hours and are available when they say they will be.
20. _____ School officials and advisors are approachable and open-minded when you have a question or problem.

Student Adaptation to College Questionnaire

The 67 items included in this survey are statements that describe university experiences. Read each one and decide how well it applies to you at the present time (within the last few days). For each item, record the appropriate number in the space next to that item.

1 2 3 4 5 6 7 8 9

Doesn't apply to me at all  Applies very closely to me

1. _____ I feel that I fit in well as part of the university environment.
2. _____ I have been feeling tense or nervous lately.
3. _____ I have been keeping up to date on my academic work.
4. _____ I am meeting as many people, and making as many friends as I would like at university.
5. _____ I know why I'm in university and what I want out of it.
6. _____ I am finding academic work at university difficult.
7. _____ Lately I have been feeling blue and moody a lot.
8. _____ I am very involved with social activities in university.
9. _____ I am adjusting well to university.
10. _____ I have not been functioning well during examinations.
11. _____ I have felt tired much of the time lately.
12. _____ Being on my own, taking responsibility for myself, has not been easy.
13. _____ I am satisfied with the level at which I am performing academically.
14. _____ I have had informal, personal contacts with university professors.
15. _____ I am pleased now about my decision to go to university.
16. _____ I am pleased now about my decision to attend this university in particular.
17. ______ I'm not working as hard as I should at my course work.
18. ______ I have several close social ties at university.
19. ______ My academic goals and purposes are well defined.
20. ______ I haven’t been able to control my emotions very well lately.
21. ______ I’m not really smart enough for the academic work I am expected to be doing now.
22. ______ Lonesomeness for home is a source of difficulty for me now.
23. ______ Getting a university degree is very important to me.
24. ______ My appetite has been good lately.
25. ______ I haven't been very efficient in the use of study time lately.
26. ______ I enjoy living in a university residence. (Or any university housing.)
27. ______ I enjoy writing papers for courses.
28. ______ I have been having a lot of headaches lately.
29. ______ I really haven't had much motivation for studying lately.
30. ______ I am satisfied with the extracurricular activities available at university.
31. ______ I've given a lot of thought lately to whether I should ask for help from the Psychological/Counselling Services Centre or from a counsellor outside of university.
32. ______ Lately I have been having doubts regarding the value of a university education.
33. ______ I am getting along very well with my roommate(s) at university.
34. ______ I wish I were at another university.
35. ______ I've put on (or lost) too much weight recently.
36. ______ I am satisfied with the number and variety of courses available at university.
37. ______ I feel that I have enough social skills to get along well in the university setting.
38. ______ I have been getting angry too easily lately.
39. ______ Recently I have had trouble concentrating when I try to study.
40. ______ I haven't been sleeping very well.
41. ______ I'm not doing well enough academically for the amount of work I put in.
42. ______ I am having difficulty feeling at ease with other people at university.
43. ______ I am satisfied with the quality or calibre of courses available at university.
44. ______ I am attending classes regularly.
45. ______ Sometimes my thinking gets muddled up too easily.
46. ______ I am satisfied with the extent to which I am participating in social activities at university.
47. ______ I expect to stay at this university for a bachelor's degree.
48. ______ I haven't been mixing too well with the opposite sex lately.
49. ______ I worry a lot about my university expenses.
50. ______ I am enjoying my academic work at university.
51. ______ I have been feeling lonely a lot at university lately.
52. ______ I am having a lot of trouble getting started on homework assignments.
53. ______ I feel I have good control over my life situation at university.
54. ______ I am satisfied with my program of courses for this term.
55. ______ I have been feeling in good health lately.
56. ______ I feel I am very different from other students at university in ways that I don't like.
57. ______ On balance, I would rather be home than here.
58. ______ Most of the things I am interested in are not related to any of my course work at university.
Lately I have been giving a lot of thought to transferring to another university.

Lately I have been giving a lot of thought to dropping out of university altogether and for good.

I find myself giving considerable thought to taking time off from university and finishing later.

I am very satisfied with the professors I have now in my courses.

I have some good friends or acquaintances at university with whom I can talk about any problems I may have.

I am experiencing a lot of difficulty coping with the stresses imposed on me in university.

I am quite satisfied with my social life at university.

I am quite satisfied with my academic situation at university.

I feel confident that I will be able to deal in a satisfactory manner with future challenges here at university.

Perception of Parental Reciprocity Scale

Who lives in your family home: _____ Mother _____ Step-Mother
_____ Father _____ Step-Father

Understanding that you may not be living with your family at the moment or communicating with them regularly, consider the following questions based on your previous experience when you were.

Please use the following scale to rate these questions about your relationships with your parents. If you live with a step-parent family, respond for the (step/) mother and (step/) father who were most like a mother and father to you. If you are answering for a step-parent, please indicate so for our reference. (I am answering for my stepmother . I am answering for my stepfather .)

Remember to read each question carefully and pay attention to the rating scale for each question.

1. _____ Parents don’t share their opinions with you, they tell you what to do.
2. _____ Parents advise you what’s good for them and not what’s good for you.
3. _____ There is mutual respect between me and my parents even in areas in which we disagree.
4. _____ My parents would never consider discussing their problems with me.
5. _____ I seldom consider discussing my problems with my parents.

When it comes to talking to others, just to be able to clarify my thoughts, I can
6. _____ talk to my mother
7. _____ talk to my father

I used to think of my parents as having all the answers. Now ...
8. _____ I can hardly stand to hear their opinions.
9. _____ I can listen to their opinions and put them in perspective.
10. _____ My mother gives me a lot more space than she did before.
11. _____ I often feel that my mother is talking “at” me and not with me.
12. _____ My mother and I can enjoy each other’s company and participate in shared activities.
13. _____ I feel that my mother is approachable to discuss problems within our family.
14. _____ My mother is comfortable expressing her doubts and fears with me.
15. _____ Mutual respect is a term that I can use to describe my relationship with my mother.
16. _____ I am able to be myself with my mother.
17. _____ I am usually very cautious about what I say to my mother.
18. _____ When I try to share my concerns with my mother, her response usually makes me sorry I began the conversation.
19. _____ I can communicate as well with my mother as I can with my friends.

My mother and I can meaningfully discuss the following issues:
20. _____ politics
21. _____ my relationship with a significant other
22. _____ career decisions
23. _____ religion
24. _____ sexual relations
25. _____ university decisions
26. _____ personal views on femininity/masculinity

27. _____ My father gives me a lot more space than he did before.
28. _____ I often feel that my father is talking “at” me and not with me.
29. _____ My father and I can enjoy each other’s company and participate in shared activities.
30. _____ I feel that my father is approachable to discuss problems within our family.
31. _____ My father is comfortable expressing his doubts and fears with me.
32. _____ Mutual respect is a term that I can use to describe my relationship with my father.
33. _____ I am able to be myself with my father.
34. _____ I am usually very cautious about what I say to my father.
35. _____ When I try to share my concerns with my father, his response usually makes me sorry I began the conversation.
36. _____ I can communicate as well with my father as I can with my friends.

My father and I can meaningfully discuss the following issues:
37. _____ politics
38. _____ my relationship with a significant other
39. _____ career decisions
40. _____ religion
41. _____ sexual relations
42. _____ university decisions
43. _____ personal views on femininity/masculinity
Student University Match

We would like to investigate the importance of a student/university match or fit when considering choosing universities. The next set of questions explore the fit.

To what extent do you feel there is a match between you and your needs and that of your present university?


absolutely no fit not a good fit neither a good fit nor a bad fit good fit great fit irrelevant to me

1. _____ the physical environment
2. _____ the student body
3. _____ the student ethnic mix
4. _____ the political climate
5. _____ the intellectual climate
6. _____ the distance from my family
7. _____ the social environment
8. _____ the amount of freedom/independence
9. _____ the anonymity
10. _____ the amount of student participation
11. _____ the academic goals
12. _____ the critical debate
13. _____ the relevance of the material in my courses
14. _____ the academic challenge
15. _____ the level of assistance available
16. _____ the variety of courses
17. _____ the program available

Personal Feelings

The items in this section will provide us with more information about how you are doing right now. Please read the instructions for each section carefully, and respond using the scales indicated.


never rarely sometimes often

1. ______ I feel in tune with the people around me.
2. ______ I lack companionship.
3. ______ There is no one I can turn to.
4. ______ I do not feel alone.
5. ______ I feel part of a group of friends.
6. ______ I have a lot in common with the people around me.
The statements below describe possible thoughts and feelings of international students about Canada and Canadian people. Please rate to what extent you agree with them. Use the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. __ I am trying to learn about Canada, Canadians, and the Canadian way of life.
2. __ I am interested in reading about Canadian culture and Canadian people.
3. __ I am interested in learning more about Canada.
4. __ I want to be more like Canadians.
5. __ I am not motivated to learn about Canadian culture and traditions. (R)
6. __ I am not interested in making Canadian friends. (R)
7. __ I have no interest in communicating with Canadians. (R)
8. __ I do not have any motivation to watch Canadian TV, read Canadian newspapers, or visit Canadian websites. (R)
9. __ I don't want to get to know Canadians as individuals. (R)
10. __ I try to avoid interactions with Canadians unless it is absolutely necessary. (R)
11. __ I have no desire to participate in or celebrate Canadian Holidays. (R)
12. __ I am not interested in attending parties and social gatherings where there are many
Canadians present. (R)

13. ___ I have no interest in Canadian history. (R)
14. ___ I want to have more Canadian friends.
15. ___ I don't want to be like Canadians. (R)

**The Reasons to Study Abroad Scale**

In the following questionnaire we provide you with different reasons why you decided to study abroad (in Canada). Please rate how each of the following reasons to study abroad applies to you. If you have any problem understanding the words or the sentences, please ask the research assistant to help you. Use the following scale:

<table>
<thead>
<tr>
<th>Not at all because of this reason</th>
<th>Somewhat because of this reason</th>
<th>Completely because of this reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 4 5</td>
</tr>
</tbody>
</table>

1. I came to study abroad because I wanted to expand my career and life opportunities.
2. I came to study abroad because I was concerned about security and crime in my home country.
3. I came to study abroad because I wanted to master a foreign language.
4. I came to study abroad because I wanted to get a good education.
5. I came to study abroad because I wanted to avoid ethnic and social conflicts in my home country.
6. I came to study abroad because I wanted to have more freedom and be independent.
7. I came to study abroad because I wanted to avoid the unacceptable political and social conditions in my home country.
8. I came to study abroad because a foreign university degree will open good employment opportunities for me.
9. I came to study abroad because I am planning to immigrate in the future.

**Perceived Stress Scale**

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>almost never</td>
<td>sometimes</td>
<td>fairly often</td>
<td>very often</td>
</tr>
</tbody>
</table>

In the past month, how often have you ….
1. ___ been upset because of something that happened unexpectedly?
2. ___ felt that you were unable to control the important things in your life?
3. ___ felt nervous and “stressed”
4. ___ dealt successfully with irritating life’s hassles?
5. ___ felt that you were effectively coping with important changes that were occurring in your life?
6. ___ felt confident about your ability to handle your personal problems?
7. ____ felt that things were going your way?
8. ____ Found that you could not cope with all the things that you had to do?
9. ____ been able to control irritations in your life?
10. ____ felt that you were on top of things?
11. ____ been angered because of things that happened that were outside of your control?
12. ____ found yourself thinking about things that you have to accomplish?
13. ____ been able to control the way you spend your time?
14. ____ Felt difficulties were piling up so high that you could not overcome them?

Thank you for taking the time to fill out this survey. If you are interested learning more about the study and any results that are published you can check out <STUDYWEBSITE> for more information.

We will also be conducting interviews with international students along similar lines as the questionnaire you just completed. These interviews will be conducted either on the telephone or in person and they will take about an hour. Participants will be paid and additional 15$ for partaking in the interview. We hope to learn more about international students and better understand your unique situation through these interviews. If you would be interested in participating please check the box below and provide us with your email address and phone number and we will contact you to setup an appointment.

Note that your email and phone number will not be associated with any data and will be kept confidential.

I am interested in participating in the interview
Email:
Phone number:

Are you interested in hearing about follow-up studies in the future? If so please provide your email below and we will contact you when another study is taking place.
Appendix D: Semi-Structured Interview

International Student Interview

Script of Oral Informed Consent

Thanks for coming to this interview. As it was mentioned in the ad, when you complete the questionnaire you will receive $15 for your time. Through this study we hope to learn more about international students, and the challenges they face. Part of this information will be used to write a report for York International and include recommendations for future students.

Before we begin I have to read to you an explanation about ethics, which will give you information regarding your rights as a participant in this study, what data will be collected and how it will be used. It is important that you understand this information so feel free to interrupt me with any questions you may have or if you need clarification.

This research has been approved for compliance to research ethics protocols by the Human Participants Review Committee of York University. As part of these protocols I need to tell you that your participation in this study is voluntary and that you have the right to omit any questions or procedures you choose. We do not foresee any risks as a result of your participation in this study. You can stop the interview at any time for any reason if you decide. Your decision to stop participating, or to refuse to answer particular questions, will not affect the remuneration that was advertised, your relationship with the researchers, York University, or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

With your permission we would like to record the interview. All of the information collected will be kept completely confidential only accessible to the researchers involved in the study. The interview will be transcribed, and at the end of the research project destroyed. The transcriptions will be kept in a password protected database on a password protected computer. Your name will not be used or associated with any of the data collected. If we do use direct quotations in any related publications, all identifying information will be removed.

Should you have any questions or concerns, you can contact the Office of Research Ethics – their contact information is on this form which is for you to keep [pass the contact form to participant] If you have any questions about the interview or the research project in general, please contact Saeid Chavoshi or Dr. Maxine Wintre whose email addresses are also included on the contact form.

Is that okay with you? Would you like to proceed with the interview?

Great! Thank you. I want to get started by asking a few questions about choosing York and the general decision to study abroad…
• University Choice
  o Why did you decide to study abroad?
    ▪ What were some of your goals and/or expectations?
    ▪ Has your experience lived up to what you expected?
    ▪ Was studying abroad your idea or suggested by others?
      • Did you feel any pressure to study abroad?
    ▪ Why did you decide to study in Canada specifically?
    ▪ Why did you decided to study in York University specifically?
  o Did you consult with your friends or family about your decision to study in Canada?
    ▪ [if yes – who and what did they say?]
  o Did you consult with your friends or family about your decision to study at York specifically?
    ▪ [if yes – who and what did they say?]
  o Did you speak with anyone at York while you were trying to decide what to do?
    ▪ [if yes] – In what position was the person? Was it helpful?
    ▪ How did you come to speak to them?
  o Imagine that some friends from home are considering to study abroad like you, and they are deciding between universities in Canada, what would you tell them about the decision in general?
    ▪ What would you tell a friend about York University?
  o Would you recommend York to friends or family who are considering studying abroad?
    ▪ What are some reasons for that?

• Family
  o Do you have any relatives or family in Toronto?
    ▪ [if yes] was that a consideration for you in choosing Toronto?
      • [if yes] how has that worked out for you? (in what way?)
  o When you are in Canada how often do you speak with your Mother at home?
    ▪ How, through what means? Phone, email, twitter, face book. letters
    ▪ Is there something that is often discussed during your communications?
  o When you are in Canada how often do you speak with your Father at home?
How, through what means? Phone email twitter face book, letters
Is there something that is often discussed during your talks?
- Do you often speak with other family members at home abroad?
  - [if yes] How, through what means?
  - Is there something that is often discussed during your talks?
- How involved do you feel your Mother is in your life here? rating scale from 1 for not at all to 5 for very involved [break – if needed:] In what way?
- How involved do you feel your Father is in your life here? Rating scale [break – if needed:] In what way?
- How involved do you feel the rest of your family members are in your life here? Rating scale [break – if needed:] In what way?
- What concerns does your Mother have about you being out of the country? [get a few]
  - Have you done anything about those concerns?
  - Is she concerned about your friends or dating?
- What concerns does your Father have about you being out of the country? [get a few]
  - Have you done anything about those concerns?
  - Is he concerned about your friends or dating?
- What concerns do the rest of your family have about you being out of the country? [get a few]
  - Have you done anything about those concerns?
- Have you been home for a visit or are you planning a visit? How often do you expect to go home?
- Does your Mother visit you here? [if Yes: how often? how do you find it?]
- Does your Father visit you here? [if Yes: how often? how do you find it?]
- After your education do you intend to return home or stay in Canada?

**Adjustment**

[I’m going to change gears now and ask some questions about your own personal experience in York and in Canada]
- How do you feel you have adjusted to life at York in general? [provide scale 1 not at all – 5 very well] – In what way?
How do you feel you have adjusted to life at York in terms of academics? [provide scale 1 not at all – 5 very well] – In what way?

How do you feel you have adjusted to life at York in terms of your social life? [provide scale 1 not at all – 5 very well] – In what way?

Transitioning to university can be a challenging process. I’m going to ask you about some of the challenges or obstacles that you have faced since coming to York. I will ask you about the earliest challenges you faced, the most significant or serious challenge and the most recent which you may still face today. So keeping the different questions and the time frames in mind, let me start by asking you…

What were some of the earliest problems or challenges you faced coming to York?

- How were they resolved
- What helped you
- Who did you discuss them with
- Was there something that could have helped you but you found unavailable/inaccessible?

What do you think the most major or serious problem or challenge that you have faced?

- How was it resolved
- What helped you
- Who did you discuss it with
- Was there something that could have helped you but you found unavailable/inaccessible?

Is there an obstacle, challenge or problem that you still face today?

- Have you discussed it with someone?
- Is there something that could help you which you find unavailable/inaccessible?

Have you ever felt you faced a barrier specifically because you were an international student?

- [if yes] could you tell me about it?

Have you ever felt you were discriminated against specifically because you were an international student?
[if yes] could you tell me about it?

- When you first moved to Canada, what did you find most helpful?
  - What did York do that was helpful?
  - Could York have done something more?

- What do you perceive to be the biggest differences between Canada and your home country that you have faced since coming here? [try to get more than 1]

**Group relations**

- Are there people from your home country that you know in Toronto?
  - [if yes] do you socialize with them? [if appropriate ask why]

- Are there people from your home country that you know at York University?
  - [if yes] do you socialize with them? [if appropriate ask why]

- Are you helped by international students from your home country who have been here longer than you?

- Are you helped by international students in anyway in general?

- Are you part of any groups or organizations on campus/off campus
  - Do you find it easy to get involved on campus? Why/how [select depending on answer]?

- Do you have Canadian friends?
  - Roughly how many hours a week do you spend with them?
  - What do you do during that time?

- Who do you socialize with the most? I.e. international students from your home country, international students in general, Canadian students or others
  - Roughly how many hours a week do you spend with them?
  - What do you do during that time?

- In your social activities, what percent of the time do you think you are using English?

**Residence**

- Where do you live now? Are you satisfied with it? [Provide scale 1-5 satisfaction scale]
- How did you decide where to live?
- Did you face any problems with finding a place to live?

- Are you living with other people? How is that? [1-5 satisfaction scale]
Have you faced any issues with your residence since you’ve moved in?
How many places have you lived? [if >1] Why did you move?
Have you ever lived on campus?
  - How satisfied were you with it? [1-5 satisfaction scale] [ask to elaborate]
  - How satisfied were you with the meal plan? [1-5 satisfaction scale] [ask to elaborate]
  - Any recommendations?

• Financial
  - How is your education being paid for? By whom?
    - [if by a third party] do you talk with them often? How are you kept informed?
      • Are they paying on a yearly basis?
      • Does it depend on any conditions?
        o What are the conditions?
        o Do they cause you any concern?
      • Have there been any problems?
      • Do you foresee any problems?

• York Services
  [This is the last part of the interview. We have discussed different aspects of your life and now we are going to talk about your experience at York University specifically]
  - Tell me about your first day at York, what went on? How did you find it?
  - Did you attend any orientation at York U? (which ones)
    - What did you find most helpful in the orientation
    - Was there something that you were looking for that wasn’t there?
    - Do you think something should be added or done differently to improve the program?
  - What are some services in York university that you find most helpful
    - How so, tell me about a time when you were particularly helped by a university service, what went on?
  - Are there services or programs that you think need to be improved? In what way?
    - How so, tell me about your experience with them.
  - Is there a service or a program that you wish York offered
What were some of your expectations regarding York’s social life before you came here?
- How has York met some of those expectations
- What do you feel are some expectations that are not fulfilled?

What were some of your expectations regarding York’s academic life before you came here?
- How has York met some of those expectations
- What do you feel are some expectations that are not fulfilled?

Did you have any other expectations before you came to York?
- How have you met some of those expectations?
- What do you feel are some expectations that are not fulfilled?

How do you get most of your information about university events/programs/services?

[Thank you for taking the time to share your experiences with me. Before we end the interview, are there any other comments you would like to make regarding the study or your experience as an international student?]