A STUDY OF SUPPORTS IN THE REDUCTION OF ACCULTURATIVE STRESS
ON FIRST YEAR INTERNATIONAL STUDENTS

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ON FIRST YEAR INTERNATIONAL STUDENTS

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ABSTRACT

Acculturative stress has a significant impact on any individual that experiences it. This type of stress is felt specifically within various immigrant populations brought on by the differences (culture, language, systems, supports, etc.) from host nation to country of origin. The effects of acculturative stress can manifest psychologically, physiologically or as some combination of the two.

This research used an online survey and individual interviews to review and examine the current supports at Conestoga College in order to assess their role in reducing the impacts of acculturative stress in first year, full-time, international students. The data from the online survey (n= 57) and in-person interviews (n=16) determined that the majority of participants felt varying levels of acculturative stress after arriving to Canada for their program of study. The data displayed that although the majority of students were aware of and accessed many of the supports provided by Conestoga College, it did not reduce the experiences of acculturative stress. Four emergent themes were also revealed through the data; navigation, emotional impacts, independence and belonging which further contribute to the understanding of acculturative stress and the field of acculturation more broadly. These emergent themes are ones which can be applied to a multitude of immigrant groups and can help to unify the field of acculturation.

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1. Introduction

Beginning post-secondary education can be a stressful experience for students regardless of discipline, institution, or location. Students transitioning to post-secondary education often feel associated stress as a result of the change in demands and expectations. Some studies have shown that both domestic and international students can feel stressors from tasks related to education and daily life, and that these stressors contribute to higher instances of negative psychological and physical impacts. (Safdar et al., 2011.) It is common for domestic and international students to feel some level of stress of when entering into a new post-secondary program, particularly due to the higher level of academic demands that have not been previously experienced. These academic stressors, however, are compounded for international students with transitioning to a post-secondary experience on top of additional factors such as language skills, navigation of new systems, and environmental factors. (Smith & Khawaja, 2011) Varying cultural norms and expectations, both inside and outside of the educational environment, is also a contributing factor for international students, which is not commonly present for domestic students. Additionally, for some international students, not having family members or friends as a support system within the same region, or even in the same time-zone, contributes to the acculturative stress they are feeling while completing their post-secondary program.

1.1 Study Objectives

Acculturative stress is the stress that is felt is due to the cultural differences from host nation to country of origin. The stress may manifest through physical symptoms, for example change in appetite or headaches, and/or psychosocial symptoms, including but not limited to, feelings of loneliness or isolation (Sadhu & Asrabadi, 1994). The occurrence of acculturative stress can be experienced by a wide variety of individuals ranging from migrants to immigrants. Previous studies have shown that international students feel acculturative stress when attending school in their host nation (Bai, 2015). The challenge is having supports in place which help to reduce the impacts of acculturative stress for these students. Instances of acculturative stress can greatly reduce the ability of international students to fully engage in the academic workload while impeding on participation in social interactions. The programs that are established by post-secondary institutions should allow international students to fully participate in the academic and social environment. The objective of this study was to review and analyze the supports available at Conestoga College in the reduction of acculturative stress on first year international students. The study aimed to accomplish this by first determining if international students experience acculturative stress in the first year of their program. The second component was to determine if the students are aware of various supports offered through the College and if so, whether they access them or not. Lastly, determining if the students do in fact

feel acculturative stress and access the supports that are available, do the supports help to reduce the feelings of acculturative stress.

1.2 Role of International Students in Canada

International students have always been an important component of post-secondary institutions globally. More recently, the prominence of international students has been seen within the Canadian context. Statistics Canada shows that in Canadian colleges and universities, "…over a decade, the proportion of international student enrolments changed from 6.4% to 16.2% by 2018/2019 and represented 57.2% of the total growth in all program enrolments." (2020, para. 5) Further details of this growth are outlined in Table 1. The table depicts the enrolment increases in Colleges and Universities in Canada comparing the years of 2008/2009 and 2018/2019. In every field of study listed, there is substantial growth that took place over the reported decade.

Table 1- Enrolment in College and Universities in Canada

	2008/2009	2018/2019	2008/2009 to 2018/2019	2008/2009 to 2018/2019
	Enrolments	Enrolments	Change	% Change
Total	**100,968**	**313,395**	**212,427**	**210.4**
Business, management and public administration	30,426	96,294	65,868	216.5
Architecture, engineering and related technologies	15,927	55,629	39,702	249.3
Social and behavioural	12,483	34,788	22,305	178.7

sciences, and law				
Mathematics, computer and information sciences	6,924	32,865	25,941	374.7
Physical and life sciences, and technologies	8,412	25,608	17,196	204.4
Humanities	11,595	23,892	12,297	106.1
Health and related fields	6,063	15,861	9,798	161.6
Visual and performing arts, and communications technologies	3,999	10,074	6,075	151.9
Agriculture, natural resources and conservation	1,617	5,751	4,134	255.7
Personal, protective and transportation services	552	4,245	3,693	669.0
Other	639	3,759	3,120	488.3
Education	1,830	3,204	1,374	75.1
Personal improvement and leisure	49	1,428	930	186.7

"Data in this table are presented using the Variant of the Classification of Instructional Programs Canada 2016 – Cannabis Primary Groupings (CIP_PG). The CIP_PG field of study "Unclassified" category is excluded from this table, and therefore the CIP_PG field of study total is a modified total. The data in this table represent enrolments in postsecondary programs. International Standard Classification of Education (ISCED) categories "Upper secondary education" and "Not applicable" (ISCED 03 and 96) are excluded from the table." (Statistics Canada, 2021)

Within Canadian colleges specifically, between 2015 and 2016, the number of international students grew 14.4%, the majority of which were long-term students

from India. (Government of Canada, 2018) That trend continued, as in 2017/2018, the most commonly reported countries of citizenship among international students at Canadian colleges and universities were: China at 28%, India at 23%, France at 7%, United States at 4%, South Korea, Nigeria and Vietnam at 2% respectively, and the countries from the rest of the world accounted for 32%. (Statistics Canada, 2020) Within Canada broadly, the majority, 80%, of international students were enrolled in post-secondary institutions located in Ontario, British Columbia or Quebec, the majority of which, 47%, were in Ontario. (Statistics Canada, 2020) This is significant when assessing the supports that are made available to the growing student population to ensure they are achieving their intended goals and can also support the acculturation process, thereby reducing acculturative stress.

The continued growth within Canadian post-secondary institutions can be attributed to an increased presence of international recruitment globally, fluctuating funding from the Canadian government to post-secondary institutions, a lack of access to quality education in home countries globally, employment prospects within Canada, and several other contributing factors. (Canadian Bureau for International Students, 2018). There have also been changes within the citizenship process which have allowed for international students to enter with shorter study permits, for example two years in length, followed by a two-year work permit. Changes such as these entice students globally to study in Canada,

particularly if they have attended post-secondary in their home country. It provides an opportunity for permanent residence application and eventually citizenship in a shorter time frame. The growth of international students in is Canada significant for a variety of reasons. It is understood that "International students bring with them a wide range of knowledge and skills across many disciplines, thereby contributing to the intellectual capital of their host country and adding to the work force." (Smith & Khawaja, 2011, p. 700) Contribution to the workforce is particularly important for highly developed countries, such as Canada, as the birth rate can often be unsustainable for the population of the country.

For post secondary institutions within Canada, an increase in international students also equates to more payments in tuition fees. During the 2018/2019-year international student tuition accounted for nearly, "…$4 billion in annual revenue for Canadian universities." (Statistics Canada, 2020, para. 6) The tuition paid by international students is vital for the growth of Canadian post-secondary institutions. Domestic student enrolment has not increased at the same rate as international students and the costs paid by Canadian students are much lower than those paid by international students. This plays a significant role in the post-secondary landscape, particularly with fluctuating funding from the Canadian government. The revenue that is generated by the increased enrolment of international students is enabling post-secondary institutions to remain profitable

and functioning. The need for international students attending Canadian post-secondary institutions is prevalent and the supports provided by the institutions should be serving the student population effectively. Having appropriate supports in place will allow for a higher retention of students in programs and will also allow for continued recruitment to the institutions. If there are supports in place which are serving the students appropriately, the reputation of the institution entices students to attend and will serve as a driving force for continued, or even increased, enrolment of international students. Understanding the relationship between the supports that are being provided and if they benefit the students they are serving, can help to reduce acculturative stress for the growing international student population and financially benefit Canadian post-secondary institutions.

1.3 Supports for International Students

Counselling services which are made available to international students are a viable resource for supporting students in coping with various aspects of acculturative stress. (Russell et al., 2008) However, literature from Nilsson et al. (2004), Ang and Liamputtong (2008), and Mori (2000) showed that these services are also significantly under utilized throughout the population. (Smith & Khawaja, 2011) The reasons for this discrepancy range from unawareness of the services to varying cultural norms and knowledge of counselling services broadly. Mental health support is something that is still stigmatized to varying degrees globally,

which can also contribute to a lack of participation by international students. Having a better understanding of the relationship between the supports that are available to students and the use of the supports is a key factor for development at the institutional level. A study completed in the United States showed that "…international students reported lower satisfaction with and commitment to the university compared to U.S. students. Campus services and co-curricular activities were more difficult for international students to approach." (Wang et al., 2014, p. 120) These findings emphasized the need to delve into the supports that are available through Conestoga College, but within all post-secondary institutions broadly. Therefore, the purpose of this study is to determine whether the supports that are provided by Conestoga College help in the reduction of acculturative stress in first year international students. This paper will provide context about acculturative stress broadly and within an international student population, examine the details of the methodological approach taken for the research and provide recommendations based on the results of the data.

2. Literature Review

The literature review will cover a range of dimensions used within acculturation and acculturative stress literature. It will examine some of the most used acculturative stress scales and definitions of acculturative stress. This information will assist with contextualizing the research conducted in this study as well as providing a framework for the study.

2.1 Definition of Acculturative Stress

There are a host of definitions for acculturation presented in the literature. A perspective presented by Redfield, Linton, and Herskovits (1936) defined acculturation as "…cultural and psychological changes that happen in cultural groups as a result of direct contact between them." (as cited in Safdar et al., 2011, p. 200) Building on this concept, one of the most commonly cited pieces of literature is from John Berry, who defined acculturation as "the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members" (Berry, 2005, p. 698) Within this understanding of acculturation, a multitude of factors impact the process including geographical location, time and life stage. Cultural groups which share similarities, such as language or economic status, will have a different experience interacting with one another when compared to cultures which are more dichotomous in nature. Individuals from cultural groups that do not share many similarities may have a more challenging time with interacting, as it is far outside of their norms and potential experiences. As Berry (2005) stated, the acculturation process is duel in nature. This idea is further detailed by Smith and Khawaja (2011) emphasizing that changes amongst the individual can happen through the acculturation process, but there can also be cultural changes in the host nation that occur with the onset of international students. The interactions between these two individuals or groups will impact both the host cultural group as well as the newly arrived individual or group. Culture evolves

and components of it will change over time. Introducing individuals or groups from other cultures allows for some reflexivity and potential change within the host nation and the international students, migrants, or immigrants.

Within the acculturation process, individuals may experience acculturative stress. Stress, more generally, can manifest itself in a variety of ways and will differ based on the individual. Acculturative stress is similar in nature, in that some people will experience physiological symptoms, such as changes to their sleep or eating habits, increased blood pressure, fatigue, headaches, or a range of gastrointestinal problems. (Mori, 2000) Others experiencing acculturative stress will have psychological symptoms, such as helplessness, isolation, a sense of inferiority, hopelessness, sadness, feelings of loss, anger, disappointment, and a more severe outcome leading to clinical depression. (Mori, 2000) There may also be some individuals experience a combination of both physiological and psychological symptoms. The development of either psychological symptoms, physiological symptoms, or some combination of the two, specifically while experiencing the acculturation process is what has become known to be acculturative stress. A major difference distinguishing acculturative stress is the ability to cope or have coping strategies to reduce the negative effects, psychologically or physiologically, the stress can have on the individual. (Berry, 2005) The ability to develop or employ coping strategies for international students is hindered because they are away from their support network, family,

and friends, are facing language barriers and trying to navigate unknown or different cultural norms.

2.2 Acculturative Stress Models and Scales

Studies on acculturative stress vary in methodology and discipline. Research in this area has largely been divided between international students and other immigrant populations ranging from individuals immigrating on work visas to refugee and asylum seekers. Some of the factors contributing to the distinction amongst these groups is due to the acculturation models that have been proposed. The reasons for migrating or immigrating are also factors when distinguishing populations within acculturative stress studies. (Berry, 1997) Although there are varying models and approaches that have been used, the work of John Berry (1997), most notably "Immigration, Acculturation, and Adaptation", has been widely adopted and underpins much of the research within the field. One example of this is the role social support plays in decreasing acculturative stress and how this support can also aid in adaption in various populations. (Smith & Khawaja, 2011) Within Berry's (1997) work, the length of time exposed to the new environment and culture can aid the individual with acculturation as well as the "fit" between the original culture and the new culture can also determine the level of acculturation, or lack of, contributing to higher levels of acculturative stress. The "fit" of the cultures are described further as the "cultural distance (how dissimilar the two cultures are in language, religion, etc.)"

which can impact the levels of acculturative stress, depending on how similar or different the cultures are from one another. (Berry, 1997, p. 23) These key indicators can help to identify acculturative stress and lead to strategies and services which will reduce its impact across a multitude of research projects, ultimately providing more unification across the field.

In Berry's (1997) work, development of a taxonomy was used "to describe acculturation attitudes of both host and migrant groups, identifying four acculturation attitudes (integration, assimilation, separation, and marginalization) which subsequent acculturation models have commonly incorporated." (as cited in Smith et al., 2011, p. 701) The stages help to show the transitions throughout the acculturation process, lending itself to more of a progressive model; however, not exclusively linear in nature. Berry (2005) proceeded to state that, "Acculturation is distinguished from assimilation (which may be ''at times a phase''); that is, there are a number of alternative courses and goals to the process of acculturation." (p. 701) These concepts have been used as a cornerstone throughout much of the acculturation literature.

There are a multitude of acculturative stress scales that have been created throughout the fields. Within each of these developed scales and acculturation research more broadly, there are several measures which can be examined to define and describe acculturation and acculturative stress. In fact, Taft (1986)

stated that methods for conceptualizing and understanding the process immigrant populations go through, vary so greatly that it is nearly impossible to create a singular approach for analysis. There are some scales and measures which have been used more broadly within the literature, providing some consistency to the research. The Acculturative Stress Scale for International Students which was developed by Sandhu and Asrabadi (1991) is one scale that has been used throughout several studies. Another scale which has been widely used and adapted is the Satisfaction with Life Scale which was developed by Diener, Emmons, Larsen, & Griffin. This scale uses five measures to evaluate the overall satisfaction the participants feel in their lives. (Wei et al., 2012) The five measures created to form the Satisfaction with Life Scale are, "In most ways my life is close to my ideal. The conditions of my life are excellent. I am satisfied with my life. So far I have gotten the important things I want in life. Lastly, if I could live my life over, I would change almost nothing." (Diener, et. al. p. 72) The Satisfaction with Life scale is an example of one that has been used in various nations globally and has been adapted into several languages. (Wei et al., 2012) The wide adaptation and use of any scale increases the validity of the studies and the scale itself, in supporting acculturative stress research.

At times, the developed scales have been used directly, but there are also instances when these scales have been used as the benchmark for modified versions throughout other studies. An example of this can be seen within the

study conducted by Wei et. al, where "The ASSIS measures acculturative stress

of international students and consists of seven sub-scales. Only the Perceived

Discrimination (8 items) sub-scale was used in this study to measure

racial/national discrimination experienced by international students." (Wang et al.,

2012, p. 121) This study used the Acculturative Stress Scale for International

Students which was created by Sandhu & Asrabadi (1994) as an approach to

examine and validate the International Friendly Campus Scale, created by Wang

et al. (2014.) Another scale which has been widely used and adapted is the

multidimensional individual difference acculturation (MIDA) model developed by

Safdar et. al. (2011) measuring, "acculturation attitudes, resilience, cultural

competence, perceived out-group social support, co-national connectedness,

family allocentrism, ethnic Identity, psychological distress, physical symptoms

and hassles." (pp. 205-206) These scales provide the fundamentals for other

model development through adaptation based on the parameters of the research,

most commonly determined by the participant group. A commonly referenced

scale found within the literature which specifically pertains to international

students is the Acculturative Stress Scale for International Students. This scale

was developed by Sandhu and Asrabadi (1994) and measures twelve themes

that are connected directly to the experiences of international students. The

Acculturative Stress Scale for International Students was instrumental in the

development of the questions used for the online survey and in-person interviews

for this study.

2.3 Measures of Acculturative Stress

Along with certain scales being more broadly used and adapted, there are particular items or themes that are consistently used as a measure for acculturative stress. One component which is often included within various scales is a measure of language. Smith and Khawaja (2011) state, "A major acculturation stressor that international students face is a language barrier." (p. 702) When individuals, including international students, do not speak the language of the host nation, it can be a major impediment and a large source of stress, often causing a rift between the newcomer and their host nation. It is also stated that the language barriers can create challenges socially and academically for international students. Although most international students are required to complete English language tests prior to attending their program, for example IELTS or TOEFL is required for Conestoga College students, the tests do not accurately gauge all components of language, such as speed of speech and accent. (Conestoga College, 2021) This can impair their ability to interact with peers and professors as well as hinder their academic performance. (Mori, 2000) Although language barriers impede on socialization, it can be rectified with an increase in language competency, as it leads to higher self-esteem. (Smith & Khawaja, 2011) However, when socialization is reduced for those individuals that do not increase their language proficiency, it can hinder the process of acculturation. Understanding and learning the cultural norms of any group is often gained through informal social conversation. Language is also a large part

of culture, thus newcomers cannot participate as easily within the culture of the host nation, when they are still learning and practicing the new language. Knowledge, including but not limited to access to supports, cannot be easily transferred between host nation and newcomers when significant language barriers are present.

Time within the host country is typically a significant factor toward the acculturation process. The length of time and experiences within the host nations' culture can provide opportunities for the individual to gain positive coping strategies for the acculturative stress they are experiencing. This, however, is not always the case as cultures are fluid and are constantly evolving over time, intentionally and unintentionally. (MacLachlan et al., 2004). With this notion, it can also be understood that "everyone is learning new aspects of their own culture." (Rudmin, 2009, p. 109) The process of acculturation is a dynamic and often, ongoing process for this reason. The longer an individual is participating in a particular culture, the better their understanding of it, which in turn can assist them in adapting and accepting the changes the culture undergoes.

The concept of perceived discrimination is another one that can be found throughout much of the literature. In fact, Rudmin (2009) states that often throughout the literature, perceived discrimination plays a larger role than acculturation. This is a significant factor given that it is challenging for individuals

to differentiate between their perception and the intent within any given situation.

An individual could perceive they are being discriminated against, while another

person in that same situation may not perceive it in that way. Ultimately, if the

international student, migrant or immigrant feel discriminated against, whether

intentional or not, it creates a challenge for them within the acculturation process.

The barrier of perceived discrimination can limit the willingness of the newcomer

to access and receive support from their host nation, which perpetuates the rift

between the cultural groups, therefore enhancing experiences of acculturative

stress.

2.4 Distinctions Within Acculturative Stress Research

Even with many of underlying concepts and literature coming from Berry's

work, distinctions of time within the host country and appraisal of life changes are

two factors which primarily contribute to the continued division in research

amongst these populations. (Smith & Khawaja, 2011) Factors that are typically

associated with certain life-stages, for instance the transition to post-secondary

education, transition into a new career, and supporting a family are all causes for

a rift in the populations that are focused on within different studies. Often, the

research will concentrate on one particular group of individuals that are in a

similar life-stage to be able to associate other stress, for instance travelling to a

new country with children, and account for that associated stress while assessing

the acculturative stress levels. This is imperative as individuals require a

wholistic approach and the participants in the study cannot necessarily completely disassociate other factors when sharing their experiences around acculturative stress. Instead, studies have attempted to account for these life-stage events in the questions that are posed to the participants, which allows for the other stresses to be acknowledged, but can focus the attention on acculturative stress itself. Time is also another factor which will impact the acculturation process and in turn impact the acculturative stress levels. Often, but not exclusively, the longer an individual has resided in the host nation, the less acculturative stress they feel due to a variety of factors such as proficiency with language, increased support networks and broadly a better familiarity with the host nation cultural norms and expectations. This is also why the research is separated amongst population groups, assessing the impact that time has on acculturative stress plays a significant role in the questions used within various studies.

Acculturation often varies based on disciplinary scope, impacting the understanding of and approach to research in the field. Rudmin (2009) stated that there are, "literature schisms between the disciplines of psychology, anthropology, sociology, and business." (p. 110) This causes a range in methodological approach resulting in a lack of continuity in the field. Often studies are conducted but cannot be replicated due to the specificity of the scale that is used. Although this phenomenon is common throughout several

disciplines, generally it creates a schism within the field that introduces more challenges for validating the data. Replication of studies also becomes more challenging when there is disagreement between scope and approaches taken. Another consideration is that "acculturation literature is also disjoint from second-language learning literature, even though language learning is a major aspect of acculturation." (Rudmin, 2009, p.111) The importance of language to the acculturation process is undeniable but adds yet another area that must be incorporated to bring forth more continuity. Given the variety of approaches within acculturation research, the opportunity for triangulation of the data is a possibility. Approaching a research project through the lens of combining research approaches will help to build consistency within the field and further validate the data that gets collected.

Similarities across the research can be found; however, there have been criticisms around the existing standards and paradigms, leading to disagreement within the discipline, and an overall need for change. (Rudmin, 2009) This indicates that a wholistic approach to acculturation must be considered. Although a more standardized approach to acculturative stress research would contribute to reliability and validity of the field, it cannot necessarily be achieved. The complexities within the populations and the acculturative stressors that impact them cannot be undermined, which has contributed to the multitude of model variants. A singular model may not work for every population, given the number

of factors that must be considered when discussing acculturation and the associated stress.

One of the challenges with developing and implementing programs to reduce acculturative stress is the level of variance amongst populations and individuals within those groups. For example, a program was developed which was "…effective in improving the sociocultural adaptation of international students, no attempt was made to measure its ability to reduce acculturative stress and to increase psychological acculturation." (Smith & Khawaja, 2011, p. 708) Although the program helped with one aspect of acculturation, it did not necessarily assist with the full acculturation experience. The same program also stated that it "may not be appropriate for international students desiring to adopt a separation acculturation attitude in the social domain, as this is likely to result in conflict when interacting with host society's acculturation attitude of assimilation adopted in this intervention." (Smith & Khawaja, 2011, p. 708) The programs and models that have been developed indicate distinctions between populations of newcomers; international students are often separated from other immigrants within the research for a myriad of reasons such as duration of time in the country and stage of life. Another contributing factor is long-term plans for international students. Some students remain in their host country, while others return back home or relocate to another country post-graduation. This may impact their

desire to actively engage with the culture of the host nation, which influences their acculturation experience.

2.5 An Understanding of Culture

The diversity and complexity of acculturation contextualizes the range of approaches taken in the research. At its root, acculturation is measuring adaptation to a culture. Culture itself is complex as it varies in definition and is impacted by a host of factors which fluctuate over time. Rudmin (2009) examines culture as including "…(1) visible artifacts, for example, food, clothing, tools, architecture and landscape; (2) visible behaviours based on inferred rules or code systems, for example, language, social roles and rituals; and (3) fundamental attitudes, beliefs and values." (p. 109) Many of these items of themselves are not distinctively culture; rather a combination of these artifacts, behaviours and attitudes which are widely accepted by the specific population that will create and attribute meaning and adopt them as their own, leads to the creation of the culture. The growth and development of culture is often organic and unwritten, which is one of the challenges for any newcomer. Rudmin (2009) discusses the idea that, "acculturation scales must inquire about culture, and different aspects of culture are important for different societies." (p. 111) Many of the cultural norms and expectations are not clearly defined and therefore can be challenging for someone to learn and understand, especially given that each

individual newcomers have their own lived experience with culture, which varies in similarity to that of the new culture.

2.6 Framework for the Study

Given the data in much of the literature, acculturative stress is an area which greatly impacts international students. With the enrolment of international students increasing across Canada, and specially within Conestoga College, it is important that the needs of this growing population is supported. In 2017 alone funded enrolment at Conestoga College, "…grew by nine per cent over Fall 2016 with a one per cent decrease in domestic students and a 62 per cent increase in international students." (Conestoga College, 2018, p. 15) This increasing trend has continued with the international student population at Conestoga, where "total post-secondary enrolment for Fall 2019 grew by 16 per cent over Fall 2018 with a 48 per cent increase in international students." (Conestoga College, 2020, p. 17) The substantial increase in the international enrolment demonstrates the need for support from Conestoga College and the broader surrounding communities to ensure the transition for these individuals occurs as seamlessly as possible, thereby contributing to lower rates of acculturative stress.

This study aimed to first establish whether first year international students at Conestoga College felt acculturative stress. From there, it was important to determine whether the students knew about the supports available and

furthermore, access the supports that are made available to them. Lastly, determining if the students do feel acculturative stress if the supports that are available help to reduce the effects of acculturative stress. The study set out to define acculturative stress in the context of international students, determine whether the students knew of the supports available to them through Conestoga College, determine if the students accessed the supports and how often they access them. The final aspect assessed within the study was whether accessing the supports by the students helped to reduce the effects of acculturative stress within their first year of study. Cross comparing the students that access the supports with the students that did not was also a consideration for this study; however, to maintain anonymity through the online survey, the data was complied aggregately and therefore could not discern whether students that accessed the supports were also some of the few participants that reported lower levels in the key acculturative stress indicators.

The work of Berry and others were used as a framework for the research conducted within this study. Therefore, for this study, acculturative stress is presented as the stress responses, both psychologically and physiologically, and its effects, that an individual experiences while residing in a host country. The varying degrees of the stress effects and the additional associated stress experienced at varying life-stages were also important considerations within this framework. First year, international students being the focus population of this

study allowed for an understanding of the experiences with new systems and supports and the impacts of these supports in reducing acculturative stress with a newly arrived population.

3. Methodology

3.1 Research Setting

The sampling frame for the study was first year international students enrolled in a full-time program at any of the Conestoga College campuses. (Palys & Atchison, 2014) Participants for the online survey were recruited by dissemination of an email through the International Office at Conestoga College. Criterion sampling was employed as the students were required to be first year international students, registered in a full-time program at Conestoga College. (Palys & Atchison, 2014) Conestoga College is a medium-to-large size polytechnic college in Ontario. The main campus, Doon which is located in Kitchener, with the recently expanded Waterloo campus and Branford campus which all host a large number of the Conestoga student population. There are other satellite campuses and training centres that are smaller in size and population, including Cambridge, Guelph, Ingersoll, Downtown Kitchener and Stratford. Conestoga College offers a range of programs including one-, two- and three-year diplomas, degree programs and post-graduate certificate programs. There are a variety of fields of study that Conestoga offers including

trades and apprenticeships, business, nursing, culinary and hospitality, information technology, computer programming and engineering.

3.2. Survey and Interview Questions

Creating a unique set of questions for the online survey and the interviews was necessary, as many of the established models assessed areas of acculturation that did not relate to the purpose of this study. Although a new set of questions were employed, the study "focused on the individual factors outlined in the models as individual factors comprise a large proportion of the international student literature, which emphasize acculturative stressors and the resulting acculturative stress that may be experienced..." (Smith & Khawaja, 2011, p. 709) Within the acculturative stress literature, many studies indicate the challenges of using a previously created set of questions as they vary in purpose and are specific to the demographics of the participant population.

Within this study, the questions for the online survey, as outlined in Appendix A, that were created were rooted in information presented in previously published literature. There have been studies indicating that it is still undetermined whether a singular acculturation model can be used to fully capture the acculturation process and acculturative stress for international students. (Smith & Khawaja, 2011) It is also difficult to determine whether a singular approach should be employed for this field, as there has been little success applying some of the

more universal scales to a variety of research projects. (Rudmin, 2009) From this, the development of a new set of survey questions combining the student involvement both on and off campus, as well as relating key acculturative stress indicators was used for this study. The survey questions gathered demographic data, data pertaining to involvement in activities, personal experiences and acculturative stress indicators. The questions for the online survey first discussed demographic information, then proceeded to delve into the nature of the understanding of and engagement with the supports that were offered through Conestoga College. This was used to determine the amount of knowledge and access of the supports within first year students. The survey questions then looked into factors of acculturative stress, including amount of communication with family members back home and whether they had a family member living within a relatively close distance, to gather information about their support network. The questions then focused on eating and sleeping habits, both of which are indicators for elevated levels of acculturative stress which can be impacted psychologically through sleep, and physiologically through eating. Finally, the questions addressed emotional responses of acculturative stress with indicating levels of stress and loneliness since beginning their program of study. The interview questions were structured to delve deeper into the experiences of the participants with regard to their involvement with supports made available through Conestoga and their experiences with relocating to a new country to study. The questions were guided but the interviews remained semi-structured in

nature, as often there were additional questions that would arise or points of clarification that were asked. The participants were also able to provide insight into gaps or additional supports that are needed for incoming international students. These questions created for this research project were informed by the existing literature. The use of the two approaches allowed for a broader survey approach to suit the needs of a diverse student population, including various countries of origin, programs of study and campus location. The interview questions were informed by the existing research in the field while examining some of the existing gaps in some of the quantitative acculturative stress surveys, to further delve into the details of the experiences of first year international students.

3.3 Recruitment

Participants for the interviews were recruited through the completion of the online survey conducted for this study. Upon completion of the online survey, participants were asked in the final question if they would be interested in participating in the in-person interview component of the research. Any students that indicated interest in participating in the interviews were prompted to then contact the researcher via email to indicate their interest. The email contact information was placed into an Excel spreadsheet and interviews were randomly selected through a randomization operation function within the Microsoft Excel program.

Research ethics clearance was obtained from both McMaster University and Conestoga College before beginning research for this project. In total, 90 individuals indicated interest in participation of the online survey. Of that, 57 individuals accessed the survey upon receipt of the confirmation email. From the accessed surveys, 53 surveys were completed, and four surveys remained incomplete. The survey was conducted from March 2019 to May 2019, while the interviews proceeded that timeframe from June 2019 to July 2019. There was a total of 30 participants that indicated interest in participating in the interview. A total of 16 interviews were conducted. Each interview ranged in length from 14 minutes to 50 minutes respectively.

3.4 Participant Demographics

Table 2- Demographic Survey Information

Online Survey Question	Responses
1. Current student status	Full-time- 52 Part-time- 1 Incomplete- 4
2.Ethnic background and/or country of origin	Brazil- 1 China- 1 Colombia- 3 India- 40 Philippines- 2 Saudi Arabia- 1 South Korea- 2 Vietnam- 1
3. Year of program	Year 1- 33 Year 2- 17 Year 3- 0 Year 4- 1
4.Length of time in Canada	5-8 months- 33 9-12 months- 7 Over 12 months- 11

As indicated in Table 2, 52 of the participants were registered as full-time students and one participant was registered as a part-time student for the online survey. The participants in the online survey identified as eight ethic backgrounds or countries of origin. The vast majority, 78.4%, of participants for the online survey reported India to be their ethnic background or country of origin. Although the survey was intended to be completed only by first year students, there were several participants that indicated they were in their second and fourth year respectively. Of the participants, 33 indicated being in first year of their program, while 17 indicated they were in second year, one was in fourth year, and one preferred not to answer. There is a potential for a margin of error in this reporting as various programs throughout Conestoga College use the terminology 'Level', indicating each semester, verses 'Year' indicating an entire school year of a program. This could have been misunderstood by some participants, where a 'Level' indicates a term or a semester verses an entire year of the program. The potential for the misreading or misunderstanding of the terminology was further indicated by the number of months reported by the participants, whereby 33 reported being in Canada for 5-8 months and another seven indicated having been in Canada for 9-12 months. Only 11 participants reported they had been in Canada for longer than 12 months and one answered that they preferred not to answer.

4. Findings

4.1 Participation in Conestoga Events

Results from the online survey showed that the majority of participants, 46 of the 52, attended their program orientation held at the one of the Conestoga College campuses. There were six participants that indicated they did not attend their program orientation. The majority of students, 41 of the 52, attended the Conestoga College International Student orientation. There were 11 students that did not attend the International Student orientation held through the Conestoga College International Office.

Some questions in the online survey allowed participants to enter open ended responses, creating some instances of more responses than participants. This can be seen in the question regarding the other activities which were attended besides program orientation. Due to the aggregation process, the data can not distinguish how many of the participants attended more than one of the additional listed events, details of which can be found in Appendix C. Comparing that data to data from the interviews, there were several participants that disclosed they had attended multiple events and activities held by Conestoga College. This demonstrates that there are some participants that are aware of the services and utilizing them, verses the students that did not attend any activities aside from their program orientation or the international student orientation. The survey question provided prescribed options, as outlined in Appendix A, to describe why the participants did not attend activities. There was also an opportunity for the

participants to add their own reasons for not attending any of the provided

activities or events. Results from the aggregate data provided additional

comments, outlining reasons such as:

"Lack of information", "Timing clashed with my classes" and "Sometimes I did

not take part in activities because it didn't look like I could feel comfortable"

There were a range of reasons why participants did not attend other activities

or events, which highlights an audience of enrolled students that are not aware of

or participating in any events being offered by Conestoga College. This indicates

a gap in support and missed opportunities for reducing acculturative stress. It is

problematic if students are not accessing the activities or events, as they will not

have the opportunity to gain potential support from engaging with them. It is also

leads to fewer opportunities for those international students to gain experiences

within the Canadian context, leading to fewer opportunities to engage with and

learn about Canadian culture.

4.2 Referenced Activities

Of the open-ended survey results, the most commonly referenced activities

that were participated in, aside from the Conestoga College student orientation

and the International Student Orientation, were 'parties' with 15 mentions, the

Leadership Conference with 11 mentions, Conversation Circles/Café with 10

mentions, the Niagara Falls trip with 10 mentions, and Life Skills workshops with

eight mentions. The parties that were outlined in the survey data did not disclose the names of the parties specifically, so it is undetermined which events these were alluding too or which service, if any, they were affiliated with. There were also a variety of other activities mentioned in the survey, which are outlined in more detail in Appendix C. The most frequently mentioned activities were provided by Conestoga Student Engagement and the Conestoga College International Office. There were also some activities mentioned which were offered through Conestoga Students Inc. (CSI.) This indicates that students are aware of various activities available on campus and have attended a variety of opportunities. It is also important to note that in these responses, participants were encouraged to list all of the activities they had attended, which can result in one participant being very involved with several activities, while others could have attended a single event. In fact, when asked, only two participants had attended 10 or more activities and the majority, 24 had attended between two and four activities.

4.3 Referenced Services

Participants in the survey were also asked about the services which they knew were available to them through Conestoga College. The data showed that the majority of participants, 51, were aware of Conestoga Students Inc. (CSI) with other services much less frequently mentioned. Conestoga Students Inc. is a student union which provides supports and activities, such as Student Health and

Dental plans, social events, and student organizations or clubs, to the Conestoga student population. The Career Hub was mentioned seven times, the Breathing Space, the Library, and Mental Health Services were all mentioned only five times each. The Breathing Space is an open, quiet space which students can use at any time throughout the operating hours to relax and unwind, located on the Doon, Kitchener Campus. There were a range of other activities that the participants of the survey indicated that they had been involved in which were offered through Conestoga College. There were 15 participants who listed 'parties' in the survey, although the names or specifics of those parties were undisclosed. The Leadership conference was named 11 times, while Conversation Circles/Cafes and the Niagara Falls trip were both listed 10 times. The Life Skills Workshops were listed eight times while "clubs" of an unspecified type were listed seven times and the International Student Advisory Council was listed six times. The remaining activities were all listed five or fewer times, details of which can be found in Appendix C. These activities were offered from a range of areas within Conestoga College, including the International Office and Conestoga Students Inc (CSI), which was reiterated through the results gathered regarding the services known to the participants in the survey.

Similarly to the survey question regarding the activities attended, participants were able to answer through an open-ended response as many services as they knew about which were offered by Conestoga College. As

indicated by the overwhelming disparity in responses between Conestoga Students Inc. (CSI) and all other services, it is apparent that several participants were aware of a very small number of services available on campus, while there were only a few participants that knew of multiple services. The majority, 51 responses, indicated Conestoga Students Inc. (CSI) as a known service, while the next highest referenced service was the Career Hub with a mere seven mentions. All of the other services indicated by the participants were mentioned five or fewer times, all of which are detailed further in Appendix C. When asked about participation in activities or events outside of the Conestoga College campus, the majority of responses, 25 participants, indicated that they were not engaged with the larger community outside of Conestoga College. However, there were participants in the in-person interviews that expressed a desire or felt a need for larger community connection for themselves and international students more broadly. This is significant when assessing the levels of acculturative stress, as the participants have the desire to better know and understand the communities surrounding the Conestoga College campuses, and the larger Ontario and Canadian contexts. More experiences and interaction with the culture of the host nation can help to reduce the levels of acculturative stress. The lack of engagement with the communities outside of the campus can skew the experience and knowledge students gain regarding cultural norms, workplace expectations, communication patterns, and many other facets of daily life in Ontario and Canada respectively.

4.4 Acculturative Stress Indicators

Table 3- Acculturative Stress Survey Question Indicators

Survey Question	Total Responses	Individual Responses	Percentage Breakdown
15. Family members within 25km distance	50	Yes- 10 No- 40	No family members within 25km- 80%
16. Visit with family within 25km	10 out of 10 responses		
17. Change in eating habits	50	Eating more- 16 Eating Less- 29 No changes- 5	Some change in eating- 90%
18. Change in sleeping patterns	49	Sleeping more- 11 Sleeping less- 30 No changes- 7 Prefer not to answer- 1	Some change in sleep- 83.6%
19. Emotions following communication with family/friends	75 (multiple responses allowed)	Sad, I miss them greatly- 16 Stressed, because I feel pressure to succeed- 17 Happy, I get to share my experiences with them- 23 Happy, I like hearing how they are doing- 17 Other: Guilty-1, Exhausted- 1	Negative- 46.6% Positive- 53.3%
20. Move to Canada	49	Very stressful- 10 Stressful- 14 Somewhat stressful- 19 Not stressful- 6	Some level of stress- 87.7%
21. Loneliness since beginning of program	50	Yes- 31 No- 18 Prefer not to answer- 1	Some level of lonliness- 62%
22. How often loneliness is felt	30 out of 31 responses	Sometimes- 12 Most days- 13 At beginning, but not anymore- 5	Sometimes- 40% Most days- 43.3% Beginning only- 16.6%

Table 3 outlines the responses provided by participants in the online survey for the questions measuring acculturative stress. The majority of the participants, 80%, indicated that they did not have any family members living in close proximity. For the purpose of this study, the distance considered close proximity was 25 kilometres of where the participants resided at the time of participation in the study. This is significant as friends and family are typically a part of support networks, and if the participants did not have these individuals in close proximity, it can hinder availability and connection with their support network. 90% of participants reported a change in their eating habits. 83.6% of participants indicated a change in their sleep patterns. The emotional impacts of communicating with family members and friends back home resulted in 53.3% of responses reporting as positive experiences, including being happy because the participants were able to share their experiences as well as enjoying hearing about how their friends and family were doing. 46.6% of responses indicated more negative responses after speaking to friends and family back home. The reasons mentioned were that they were sad because the participants missed them, stressed because they felt pressure to succeed, guilty and exhausted. For this question, participants were able to provide as many responses as applicable to explain their experiences. 87.7% of participants indicated that the move to Canada included some level of stress, ranging from somewhat stressful to very stressful. The remaining participants did not find the move to be stressful. 62% of the participants indicated feeling lonely since beginning their new program of

study in Canada, while 36% indicated they had not felt lonely. Of the 62% that

responded they felt lonely, 40% indicated that they felt lonely only sometimes,

43.3% indicated they felt lonely most days while 16.6% indicated they felt lonely

at the beginning of the program but no longer felt this way. Even though there

were participants that were not in their first year of study, the levels of

acculturative stress were significant. Although time is a factor in reduction of

acculturative stress, it is not the only factor and many individuals still feel the

impacts of it after a year, or longer, in the host nation. The results from these

questions were the indicators for acculturative stress and according to the results

of these key indicators, 74.9% of responses indicated varying levels of

acculturative stress.

4.5 Limitations

The data gathered from the online survey and the interview questions

indicated that there were participants in the study that were not in first year of

their program. It was specifically outlined in the recruitment email and the

subsequent email conversations that the study was focusing on first year

international students; however, there were a total of 18 participants that

disclosed they were not in their first year. This impacts the results of the study,

as previous research has determined that time is a factor in the acculturation

process, and acculturative stress in general. Berry (2005) indicated that changes

to an individual, primarily internal adjustments, that are cultural and psychological

in nature take time to occur. Although the amount of time may vary depending on the individual, presumably the longer an international student has had in their host nation, the more opportunity they have had to form these internal adjustments. For the purpose of this study, this is significant as time allows the participants to become aware of the varying services available to them, as they would have more experience within the institution and navigating the systems used. The completion of at least one year of their program also allows for these particular participants to have had more time to build connections with peers in their program or in other programs, which can be advantageous in discussing the supports that others have participated in, thereby increasing their knowledge of what is available to them as Conestoga College students. The results of the survey are therefore skewed in proportion to the number of services known and attended by the participants. However, during the in-person interviews, of the 16 participants the majority, 15, were in their first year, which allowed for further discussion of the services and interaction with those services through the lens of a first-year student.

Time is an important factor assessed within several acculturative stress models that is not necessarily captured within this study given the nature of the research, particularly having first year students as participants. (Safdar et al., 2011) This was not a longitudinal study, which limits the understanding and comparative ability to assess how time may impact the experience with

acculturation along with knowledge and access of supports offered through Conestoga College.

Participation in the study was made available to all enrolled international students at Conestoga College and was completely voluntary. The recruitment email indicated participation was limited to first year students. Results of the research were therefore limited to individuals that sought out participation in the study, which impacts the overall data. Information from those individuals that did not participate are not reflected in the data, which can exclude a variety of different experiences, particularly related to knowledge and access of supports. As the email for participation was disseminated through the International Office and was sent only to student email accounts, the non-participants could represent a greater proportion of individuals that do not know about or do not access the supports available. The number of participants in the study also has an impact on the results. Although there have been some criticisms of small N-studies, saturation was reached during the interview process, ultimately leading to a rich set of data depicting the experiences of the participants. (Rudmin, 2009) The number of participants in this study was relatively small, when comparing the number of participants to the overall size of the Conestoga international student population. This in part is due to the size of the institution compared to previous studies that have been conducted at larger post-secondary institutions in North America and across the world. The anticipated enrolment for international

students in 2019 was at 8,300, and the actual population count in 2018, a year prior, was at 6,643 students. (Conestoga College, 2020) While there were 52 students that participated in the online survey, the overall registered international student population was significantly larger. However, when considering the research was limited to include only first year students, the proportion of the population that participated substantially increases.

Another potential limitation for participation is the association of the email with Conestoga College. Although it is beneficial for the email to be sent through the International Office to capture a wider cross section of participants, the affiliation with the current educational institution could pose a perceived risk for students. This situation has also been found in other studies with international participants. One example of this was in relation to Safdar et. al which stated, "the authors argued that the international students may have under-reported academic stress due to them considering admission to stress as a weakness and shameful." (Smith & Khawaja, 2011, p. 703) The cultural constructs of the newcomer will shape the level of transparency in terms of divulging their full experience with others, even if conversation around these topics and challenges are a part of the culture of the host country. Within the interview data, some participants conveyed information that was on behalf of experiences shared with them by friends. It is difficult to discern whether these experiences were actually from the participant

but referencing a friend in order to reduce risks to themselves, or if they truly were experiences of friends that did not participate in the study.

Given that the email was disseminated through the Conestoga College email system, students that are not aware of how to navigate or make use of the system would not have participated in the study. This consideration would include some of the most vulnerable population not being surveyed or interviewed, which can impact the overall data. If the majority of the most vulnerable students were not participating in the study, the data for the number of students reporting acculturative stress and number of students aware of and accessing supports would potentially be significantly lower than reported in the study. This is a major consideration, as the study is emphasizing the need for supports specifically for these students.

The researcher of this project was in the role of student researcher; however, the researcher held a position as a professor at Conestoga College at the time the data was collected. The participants of the research were notified of this information prior to agreeing to participate in the study. The random selection of the interview participants did not result in any participants being current students of the researcher. This however, does not mean that the participants which completed the online survey were not current students of the researcher.

Although the researcher notified the participants of this information, it is important to note that this may have impacted how the participants answered questions.

5. Discussion

Data gathered from the online survey and the in-person interviews highlighted the experiences from the first-year international students at Conestoga College. Based on the responses from the survey and the interviews, the majority of the participants experienced acculturative stress through psychological, physiological symptoms or some combination of the two. In addition to the sought-after indicators of acculturative stress outlined in the survey and interview questions, four central themes emerged addressing acculturative stress while offering added insight into the experiences of the participants. Navigation, emotional impacts, independence and belonging are all significant to the experiences of the participants and can provide further context for the data. These emergent themes are ones that can be applied more broadly to the field of acculturation and acculturative stress as they can be adapted and applied to the demographics of the specific population. The themes also provide insight into additional programming that can be offered for first year international students to support them in reducing the impacts of acculturative stress.

5.1 Acculturative Stress Indicated

As outlined in Table 3, the questions specifically targeting acculturative stress within the survey resulted in significant proportions of the participant population reporting experiences of acculturative stress. The majority of the participants indicated some level of change in their eating patterns, 90%, and their sleeping patterns, 83.6%, both of which are psychological and physiological indicators of acculturative stress. In two of the open-ended survey questions, participants responded with comments contributing to both the established acculturative stress indicators as well as providing details for the theme of connectedness. A comment made in response to question 8, as outlined in Appendix A, provides additional context to the importance of language skills according to the established acculturative stress indicators:

"I can only choose one, so I am writing here. It was for new friends, precisely, a connection that I can feel like I am the part of this society. Also, for my language skill improvements, to know more about Canadian culture, actually, I just wanted to get involved too, also I was thinking about resume too of course."

This response also bridges the need for connection and understanding to the larger Canadian culture, while also bringing forth the importance of knowledge and skills to include in their resume building toward their career trajectory.

There were also two responses included from the survey regarding question 19, as outlined in Appendix A, both of which indicate challenges after discussing

with friends or family members back home, which are typically included as a part of support networks for individuals.

Online Survey Participant 1- "Guilty, because I don't manage my time well enough to keep myself updated with how they're doing or keep them updated with how I'm doing. Its hard to balance my energy out between trying to do well in class, get involved in extra-curricular, taking care of my health and then not forgetting about my family while I'm at it. I feel bad enough already for leaving them behind in order to live a much better quality of life. Everyone deserves the same."

Online Survey Participant 2- "I am usually exhausted when I talk to them due to heavy study load and workload from part-time job. I don't feel like talking to anybody but as they always worry about me, I try to talk to them normally."

These responses indicate some of the emotional impacts acculturative stress has on individuals, while also incorporating the emergent theme of independence with having to balance school and work.

Navigation of systems, broadly, encompasses many connections between the experiences and the challenges faced by the participants. Emotional impacts highlight the commonalities between the literature on acculturative stress and the experiences of the participants. The notion of sense of belonging or

connectedness relates to various levels of community ranging from the smaller campus community through to the wider Canadian community. Independence exemplifies the opportunistic nature of being a post-secondary student as well as an international student. Each theme that emerged within the data can be expanded upon to provide further explanation and contextualization.

5.2 Navigation

Navigation encompasses a myriad of areas which relate to academic, social and cultural systems. The notion of a post-secondary student, both domestic and international, having to navigate a new academic system is one that has been cited in literature; however, additional stressors such as language and a different approach in the educational approach or environment were present for international students. (Smith & Khawaja, 2011) Navigating the academic system for international students has the added challenges of potential language difficulties, cultural differences, and the style of the system itself. The majority of the Canadian education system uses an outcomes-based learning approach, which students are often not familiar with.

P13- "We used to have same kind of burdens though. In exams, a little bit of higher. Here, this is the thing and three-hour classes, that's a lot for us. There we have 40 minutes or one hour lecture and after that we have a break. Though we have a breaks here too, but to the same teacher is continuously teaching for three hours. This is not what there, like we're not used to it."

P11- "Uh, one challenge I can say would be understanding the, uh, education system over here. Because in India, uh, we are used to a very kind of, uh, what to say *pause* interactive or assertive type of education system. Where in the, uh, professor or lecturer, uh, they actually, I mean, kind of pressurize us. Not, I mean properly pressurize us, but they kind of, you know, motivate us to speak up and over here, it's kind of laid back. That is you want to answer, it's okay, if you don't want to, we can always move on to the next question or the next person, whoever wants to answer."

The forms of assessment are also varied from other educational systems, as explained by many of the interview participants.

P5- "There have been many challenges, uh, I faced. Like during my studies in Canada, because basically I'm from India and, uh, we used to, uh, give examination after your like completion of the whole academic year if we will have, uh, first term, second term, then the final examination, but here we are facing like four, four, four, like every four months. We are have changing the semester and taking new subjects and everything…"

Approaches such as flipped-classrooms, active learning techniques and group work were not commonly used throughout previous learning experiences within their home countries. A non-lecture style approach to learning can be an

overwhelming experience when all previous educational experiences have been structured in that manner. Although some of these challenges may be faced by domestic students as well, given that the stylization of teaching varies dependent on the individual, the general comments made by the participants indicated this was a large obstacle specifically because they had no previous experience with the Canadian education system.

Another frequently mentioned factor within navigating the education system, was the use of technology. Several interview participants stated the difficulties of using and understanding technology for classroom activities, content, and assignments.

P9- "I think, uh, basically what problem, uh, the international students are facing is basically, uh, something electronically. Computers."

P14- "So yeah, when I came here, back home I wasn't that much used to use the computer. I used to use the pen and paper. So first of all typing was the big thing, was a big thing, but I learned by myself slowly and uh, then here they communicated by emails all the time. That's right, but back home is just face to face. So I learned that, how to do that. I used to do that back home, but it was little, but not that much. Here everything is just with emails."

Although it may be challenging to differentiate acculturative stress from general stress experienced throughout life, some participants noted different sources of stress they experienced. (Rudmin, 2009) Participants cited challenges around the educational experience specific to the Canadian context, which would not necessarily be experienced by students who are familiar with the norms of the education system. These challenges were also not ones they faced with their educational experiences in their home country. There was also discussion about navigation of transportation systems and navigating around cities.

P12- "Yes, so as a person, means uh the transport system is different in Canada than in my, my home country. For example, if I'm stepping out in, uh, on, if I'm stepping out of my home in India, I know where to go, have to go, and what roads for follow. But in Canada, if I'm stepping out, I at least have to step out, one half an hour ago to search my location and then place to go and find on perfect route for it."

Navigation of all sorts is challenging for international students. One of the most commonly referenced challenges was creating or completing assignments through various computer technologies, such as Microsoft PowerPoint.

P4- "Uh no. There's all sorts of challenge that regarding to some assignments, because, uh, when I was in my Bachelor's, we have to submit assignment in writing on paper. But here in Canada, I have to submit some, in some subjects, I have to submit it online or PDF write it. So, we have to just write

our assignment, PowerPoint prevention or MS Word, with, we are using some specific tools like, uh, MS Video, or like that. So that's challenging for me because I don't know about all that stuff, so, but not I'm used to that because I completed my first semester here, so."

The ability to use the technologies proficiently caused a lot of extra time to be spent on completing the required assignments. Many of the participants explained the lack of access or use of computers within their previous educational experiences in their home countries. This is a difference between many domestic students and international students, as technologies are more commonly used and available throughout the Canadian educational system. Although post-secondary education can be a source of stress for both domestic and international students, there is an added stress of acculturating to the Canadian system.

The theme of navigation also includes data which frames students' understanding and accessing of the supports available through Conestoga College. Results from the survey and from the interviews indicated that a portion of the international student population were both aware of and accessed the supports available; however, there were also many students that did not access the supports for a myriad of reasons, while others also disclosed they were unaware of supports available. The lack of awareness indicates that although

there is messaging taking place on behalf of Conestoga College, the students are not able to navigate the various systems, such as the college e-mail system or the Student Portal, to receive the information. This indicated that the students are not aware of the overall process being used by Conestoga College, which contributes to missed opportunities. These missed opportunities decrease the likelihood of acculturative stress being reduced and, in some instances, can even lead to increases of it as they are feeling disconnected from the host country.

5.3 Emotional Impacts

Results from both the survey and the interviews displayed a range of emotions from the participants. Undoubtedly, many of the study participants experienced acculturative stress; however, within the acculturation process more generally, individuals will also have positive experiences, which was the case for the participants as well. As displayed in question 19 of the survey, outlined in Appendix A, there was a mixture of positive and negative responses after speaking to friends and family back home.

P3- "So there has always been ups and downs…"

P5- "Uh, and Conestoga College. Oh, I had different types of experience like even I have a positive experience and a negative experience too."

Studying internationally provides many opportunities for individuals and the excitement and gratitude, which many of the participants discussed, demonstrating the range of emotions experienced with studying abroad.

P9- "I think my experience here in Conestoga College is very good so far. Till now, like uh, I think it has been a dream. Like coming to Canada and studying here I think, I don't feel any kind of difficulty but I'm really enjoying it. I know there is a workload of studies, there is a workload of part-time jobs, but I am able to manage all those things"

Every individual will view challenges in a different way, with some remaining optimistic, while others will feel defeated and hopeless when trying to overcome the challenge. The goal of the supports made available to international students should be to provide the information and services to all students, while extending extra support to those that find the adversity too challenging to overcome alone or with their own support network. The positive experiences cannot be dismissed, but the focus for providing supports needs to be primarily about the negative emotional impacts of acculturative stress, many of which were cited in the survey data and throughout the interviews.

P7- "Uh, challenges. First of all, you have to leave your home. It's the biggest challenge. Because I was personally homesick, and I was out just living in homestead of something like that. But here I have to live on my own, so it's the biggest thing for me."

The emotional impacts are significant for the transition into a new culture and also for the success, or lack of, with the acculturation process. Every individual will face challenges regardless of situation, but the added layer of experiencing and learning a new culture, language and ultimately way of living can be extremely taxing, thus the development of acculturative stress.

P8- "…as well, I would say some identity, um, issues. So just as, as a foreigner, as an immigrant and like coming to such a multicultural country, I'm sure there are, so, a lot of people that deal with identity issues. Like just, knowing who they are, figuring out who they are and who they should identify with. Like I guess a lot of people have a strong sense of, like, nationalism or just the way they identify themselves. Like, I'm this, I'm a citizen of this country, or I'm this ethnicity, I, I'm this race or whatever. And for me that was something that I kind of struggled with coming here."

This stress can hinder the success of the individual as well as impair their physical or psychological health. Negative emotional impacts for the participants of this study could impede success within their program of study, their success in acculturation to Canadian society, future work opportunities or even their ability to gain permanent residency or citizenship depending on the extent of the negative impacts. The supports provided through Conestoga College and other post-secondary institutions should address some of these challenges in order to curb

some of the negative emotional experiences, which is contributing to acculturative stress.

5.4 Independence

Post-secondary education allows for individuals to gain independence through a variety of new experiences. This is particularly true for international students, as they will be gaining new cultural, residential and the learning experiences without direct guidance and support from family members.

P9- "Independently is a bigger issue because, you know, I, you, in India, none of the students, I think all the students, were parents dependent. In India, the culture is just like this. You cannot, before marriage, you cannot do anything of your own. You're all depend on your parents."

For many post-secondary students, domestic and international, it is also their first opportunity to live away from home. The experience of living away from home allows students to learn new skills and gain experiences which contribute to their independence as an adult. However, there are many challenges associated with developing independence for all students, including time-management, decision making and lack of knowledge in commonplace tasks such as finances and health care. The development of independence is vital for post-graduation experiences but requires a substantial investment of time outside of requirements for their educational programs. It is in the balancing of daily

tasks and educational requirements where the skill of time-management becomes significant. If the students have not had much experience with this, which is the case for many international students, as indicted in several of the participant interviews, the students struggle.

P3- "In India it's so different. The children don't work until their parents are there to help them. They pay for the studies, food, everything. And here we have to by ourselves."

Furthering this, is the gap in knowledge of some commonplace tasks which is particularly prevalent for international students, as they are not accustomed to services and supports available to them through their educational institution. The studies of Sherry et al. (2004) and Khawaja and Dempsey (2008) found that international students had a tendency to have lower perceptions of services that were offered through their educational institutions when compared to domestic students at that same institution. (Smith & Khawaja, 2011) This is significant when discussing the theme of independence, and also connects to the theme of navigation, particularly in navigating the supports that are provided by Conestoga College. The participants within this study may have a different perception regarding the supports that should be provided by the institution. Previous experiences with educational institutions and a lack of independence may impact their ideas of what is and should be provided in terms of supports. The students may also have a different understanding or expectation of what is

provided based on different cultural expectations. As noted by a participant during one of the interviews:

P8- "…Yeah, um, like my friend, she's a nurse. She works in a clinic. Most of the people that come in for like STIs, or unplanned pregnancy and things like that. A lot of them are international students. So, they definitely need education on that and assistance as well."

Within other countries, educational institutions are not necessarily host to services outside of education. Therefore, international students would not be accustomed to accessing services related to health care or finances from their educational institution, minimizing the likelihood of students seeking these types of support from Conestoga College. This also relates to cultural norms and customs, as some countries and cultures do not allow for the use of contraceptives or are not provided with sex education. As it is more readily available and more widely accepted in the Canadian context, information and education can be provided if newcomers wish to receive it; however, the knowledge and access of this information is dependent on the individual student independently seeking out the assistance and information.

The independence that the interview participants discussed also delved into areas of time management and household duties. Many of the participants

struggled with managing their time between school, part-time work, household duties and connecting with friends and family.

P11- "…Uh here, so I mean if you have time to go, you know, read each and every point, then it gets easier, but obviously here we have some challenges. Like we have to work part-time and all so yeah. We have to take up that and everything else and for example, I myself work nights. So, when I come home in the morning, it's evening time back home, yeah. So that's when they get free and they start calling up."

Although they cited challenges with having to balance work and school, the participants were gaining financial independence from their family and support network back home. Experiencing financial independence was challenging due to the extra workload, but for many it was also an exhilarating feeling to be able to make their purchases and decisions for themselves without having the guilt of spending someone else's money. The experience of working and attending school is also beneficial for their independence, as balancing multiple tasks will be a skill used far beyond their post-secondary education.

5.5 Belonging

The desire for cultural experiences within the Canadian context was referenced several times throughout the interviews.

P1- "…so I say why not? I have the time, I have, instead of doing nothing at my home, I can like enjoy time doing other activities and learning more about Canadian culture."

P8- "I feel that it would, it would be a great opportunity if there was something that the school cold facilitate to, you know, get international students to interact with Canadian students…"

The international student participants stated their desire to meet Canadian friends and have classes with Canadian colleagues in order to gain new experiences and insight. Research has shown that, "overall, social support with either locals or co-nationals appears to be an important buffer of acculturative stress, thus, enhancing adaptation, and warranting inclusion as a predictor variable in acculturation models." (Smith & Khawaja, 2011, p. 707) When there are limited opportunities for international students to interact with Canadian students, the ability to create these sorts of shared experiences are reduced greatly. The activities that are provided to the international students which are hosted by Conestoga College's International Office, are often limited to only international students, which allows for relationships to be build with individuals that may have a more shared cultural background but limits the social interaction with domestic students outside of the classroom setting. Furthermore, some programs have intakes comprised of fully international students, which limits

opportunities for cross-cultural interaction within the academic setting and hinders the progress in reducing acculturative stress.

P13- "I don't know why but Conestoga has different classes for international students. I didn't like this thing at all. It should be like, I think we, we don't get the chance to know Canadian students. Canadian like young generation. We, we kind of, it is always, uh, there's always a barrier because of this reason…"

A comment from one of the participants in the aggregate online survey data responded to the open-ended survey question 5, as outlined in Appendix A:

Online Survey Participant 3- "There are a lot of services available but no one is available to help or guide or advise students. And I think it applies for all departments."

This serves as an indicator that although supports are made available to international students, obstacles with understanding and navigating the complexities of being a new international student hinders access to the supports. Barriers such as technology, language, cultural and social norms can all be contributing factors for students not being able to fully utilize the supports that are available to them. One way to mitigate the concern around a lack of belonging is to incorporate opportunities through a variety of supports and activities, both inside and outside of the classroom, as well as in the larger community outside of

Conestoga College, to have the students engage with and immerse in Canadian culture. This has been particularly challenging for some of the participants, as some programs offered are specifically for international students, which hinders their ability to connect with domestic students, as noted by one participant:

P8- "I feel that would, it would be a great opportunity if there was something that the school could facilitate to *pause* you know, get international students to interact with Canadian students. Because I feel like for some holidays or some, I'm not sure what would be a good example, but I do feel like there is a sense of fear amongst Canadian students, whereas like they feel excluded. They feel like this is not their home anymore."

A lack of accessing supports, the types of supports available and a lack of interaction with domestic students are all factors which impact the ability of some international students to feel a sense of belonging within Canadian culture. The need for sense of belonging in the Canadian context is vital and if it is not present, it furthers the effects of isolation and acculturative stress for the students.

5.6 Impacts of supports on students

Language is undoubtedly a prevalent factor when analyzing acculturative stress levels. Even participants that have English as an additional language, but have been speaking it for many years, indicated challenges with comprehension

upon arrival to Canada and in their program. The challenges of understanding a language cannot be dismissed as a potential factor for acculturative stress and not being able to understand or access the supports available to them.

P3- "So first of all the language. English is not my first language. Sometime I know I have studied English since my childhood, but sometime there are some words I don't understand. And sometime like, uh, the accent I don't understand. It's different. That has been the problem."

P13- "So, and um, language is something that you have to know to tell, to, to hear and listen to people. And there are a few, a few students who are not so familiar with, not so comfortable with English, so it is a big challenge for them."

Without language comprehension, there is a likelihood of misunderstanding and misinformation, which can lead to frustration and missed opportunities for support. Students who have not accessed supports available from Conestoga College could be in part due to a lack of English comprehension or even misunderstanding of the terminology used to express the details of the supports. The role of language coupled with navigation, belonging, independence and emotional impacts all play an integral role in whether students are accessing the supports available to them and how impactful the supports are in reducing their acculturative stress.

At the outset, this study was predicted to show that the majority of first year international students did feel acculturative stress to varying degrees and that the supports that were provided by Conestoga College were not mitigating the effects of acculturative stress, primarily because first year students were not necessarily aware of the various supports being offered. The data that was collected highlighted that the participants were in fact feeling acculturative stress and that the supports were known to some but not to all first-year students. Some of the participants in the interviews expressed gaps in the supports available, many of which referenced the lack of integration with Canadian students and a lack of information regarding Canadian systems and norms. The data also showed that the supports available were helpful in supporting the students; however, the supports did not necessarily translate to reducing the impacts of acculturative stress, as the majority still reported changes to their sleeping or eating habits along with feelings of sadness and other negative emotional responses.

6. Conclusion

This study aimed to determine if first year international students at Conestoga College felt acculturative stress, whether the students accessed the supports available to them and lastly if the students felt acculturative stress, and whether available supports reduced the levels of it. Through the research, it was determined that the majority of the participants felt acculturative stress to varying degrees. The questions posed within the survey and during the interviews

demonstrated psychological and physiological impacts of acculturative stress on the participants. The research also showed that many of the students that participated were aware of several of the supports that were available to them and did access them; however, there were many instances where students still required more assistance in some of the social and cultural experiences to help reduce the experience of acculturative stress.

6.1 Recommendations

A recommendation for Conestoga College, and post-secondary institutions within Ontario more broadly, is to consider of the interaction between international students and the larger surrounding community. It has been shown that "…the need for group level interventions, such as the society of settlement, particularly universities, proactively seeking to enhance the acculturation of international students." (Smith & Khawaja, 2011, p. 708) This consideration has the potential to assist students with reducing acculturative stress through creating opportunities for international students to experience the area and community surrounding their campus. Participants in the interview discussed the desire to experience and understand the community outside of the school in order to ease their daily interactions, which is particularly true for students that are not living on campus residence as they have to navigate public areas such as transportation, food and housing. Providing opportunities to volunteer in various organizations or reduced admission prices for events in the community will help bridge the gap

between students and the community. Often, there is a disconnect between knowing about the events or supports available within the community, so creating a direct link for the student to the organizations and events in the community will help reduce the barrier of navigation.Building opportunities for interaction within the larger community should also be emphasized further within the Ontario College system, as many students are enrolled in two-year programs verses University programs which last three or four years. This means that international students enrolled in a college program will need to build that knowledge and further their acculturation within that larger community in a shorter period of time.

Creating more opportunities for international students and domestic students is another recommendation for Conestoga College and other colleges across Ontario. A combination of academic and social opportunities should be provided by the institutions to allow for students to interact with one another in various types of scenarios and environments. Academic interaction will help develop an understanding of professional relationships and norms within the Canadian context, which will benefit all students in their future careers. The social interaction will allow for opportunities for more organic conversation, which can stimulate a sharing of knowledge around some of the social and cultural constructs, while also providing information about navigating systems and creating a sense of belonging within the Canadian context. The desire from the participants in the study to have more opportunities to interact with domestic

students both in academic and non-academic settings was strong. Some of the participants in the interviews recommended incorporating things like workshops, festivals and sports teams in order to accomplish the academic and social cohesion they desired. The relationships that are built between the international and domestic students can help with the acculturation process, as it will allow for both parties to get an understanding of cultural norms and cultural differences. It will also further assist the international students in learning various systems and expectations within the Canadian context.

Assuming that students will know how to access a service, support or resource because they have been given a link to a website or have been provided with the information is not accounting for the demographic. The international student that is receiving the information may not be proficient in the language, they may not have familiarity with the technologies, or the systems being used or they may be in an emotional state and not processing the information fully. These factors need to be thought about when providing information to the students as they are first arriving but also as they are progressing throughout their program. A recommendation to post-secondary institutions is to provide more opportunities for students to engage with the specific support or resource as it is being shown to them and allow for more opportunities to meet and discuss in smaller groups to engage with the information more openly. These smaller groups can be lead by domestic student volunteers within the program of study, or from the institution more broadly. This

will allow for students to have that immersive experience with the resource or support and will also allow them to interact with one another, and a domestic student.

6.2 Future Research Opportunities

The use of distraction as a coping mechanism for acculturative stress is a potential for further research. Throughout the interviews, participants often referenced the notion of staying busy in their ability to cope with the associated distress felt. This is one area that the supports provided by Conestoga College were helpful for students, as they were able to occupy their time outside of the classroom with various activities that were related and unrelated to their program of study. The willingness of individuals to occupy their time as a method of coping or overcoming the feelings of acculturative stress is one that merits further research.

Research through a cross-sectional study comparing acculturative stress patterns between students that engage in the larger community, regional or provincial, and those that only engage within the College community can also contribute to the acculturation literature more broadly. The impacts of students connecting to a larger community, such as the city of their current institution, could impact acculturative stress levels and experiences broadly, both during their program and post-graduation.

A future opportunity to further this area of research is a comparative study between the experiences across Canadian post-secondary institutions, differentiating between Universities and Colleges. Government funding varies between the College and University sectors, which may impact the development and implementation of supports to the students. Length of time within the institution could also be assessed as a contributing factor to the reduction of acculturative stress within this comparative study.

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Appendix A- Online Survey Questions

1. What is your current student status?
   _____ Part-time
   _____ Full-time

2. What is your ethnic background and/or country of origin? ____
   _____ Prefer not to answer

3. What year of your program are you in?
   _____ Year 1
   _____ Year 2
   _____ Year 3
   _____ Year 4
   _____ Prefer not to answer

4. How long have you been in Canada?
   _____
   _____ 1-4 months
   _____ 5-8 months
   _____ 9-12 months
   _____ Over 12 months
   _____ Prefer not to answer

5. Please list all of the services that you know about that are available for international students at Conestoga College:
   _____
   _____ Prefer not to answer

6. Did you attend your Program Orientation?
   _____ Yes
   _____ No
   _____ Prefer not to answer

7. Did you attend the Conestoga College International Student Orientation?
   _____ Yes
   _____ No
   _____ Prefer not to answer

8. Have you participated in any activities, besides orientation (workshops, conferences, trips, festivals) offered through Conestoga College?
   _____ Yes
   _____ No
   _____ Prefer not to answer

9. If you answered 'yes' to question 8, how many activities have you participated in since beginning your program?

_____ 1
_____ 2-4
_____ 5-7
_____ 8-10
_____ More than 10
_____ Prefer not to answer

10. If you answered 'yes' to question 8, select all of the activities you have attended:

_____ Leadership Conference
_____ Niagara Falls Trip
_____ CSI Clubs
_____ Life Skills Workshops
_____ CSI Parties (Frosh Week, Pub Night, Movie Night, etc.)
_____ International Student Advisory Council
_____ LGBTQ2+ Events
_____ Leadership Ambassador Program
_____ Others: _____
_____ Prefer not to answer

11. Why did you attend the activities through Conestoga College? Select all that apply:

_____ To make new friends
_____ To practice my language skills
_____ To share the experiences with my friends and family back home
_____ To get more involved with Conestoga College
_____ My friend(s) wanted me to go
_____ I thought it was mandatory
_____ To experience more parts of Canadian culture
_____ To add to my resume
_____ Other. Please explain: _____
_____ Prefer not to answer

12. If you have not attended any activities through Conestoga College, please explain why by selecting all statements that apply:

_____ I did not know about any activities
_____ I did not have the time to attend
_____ I did not feel comfortable attending any of the activities
_____ None of the activities sounded interesting to me
_____ I could not afford the activities
_____ Other. Please explain: _____
_____ Prefer not to answer

13. Do you participate in any activities that are not offered through Conestoga College? Please list all activities:

_____

14. How often are you in touch with your friends and family back home?
_____ Every day
_____ 4-6 days per week
_____ 1-3 days per week
_____ Less than once per week
_____ Prefer not to answer

15. Do you have any family members that currently live within 25KM of where you currently live?
_____ Yes
_____ No
_____ Prefer not to answer

16. If you answered 'yes' to question 15, how often do you visit with them?
_____ I visit them everyday
_____ I visit them 4-5 times a week
_____ I visit them 2-3 times a week
_____ I visit them once a week
_____ I visit them 2-4 times a month
_____ I do not visit with them
_____ Prefer not to answer

17. Have you noticed a change in your eating habits since arriving in Canada?
_____ Yes- I am eating more
_____ Yes- I am eating less
_____ No- I have not noticed any changes to my eating habits
_____ Prefer not to answer

18. Have you noticed a change in your sleeping habits?
_____ Yes- I am sleeping more
_____ Yes- I am sleeping less
_____ No- I have not noticed any changes to my sleeping habits
_____ Prefer not to answer

19. How do you normally feel after speaking to your friends and family back home? Check all that apply:
_____ Happy, I get to share my experiences with them
_____ Happy, I like hearing how they are doing
_____ Sad, I miss them greatly

_____ Guilty, because I get to have this wonderful experience and they don't

_____ Stressed, because I feel pressure to succeed and do well to help them

_____ Other. Please explain: _____

_____ Prefer not to answer

20. How stressful have you found your move to Canada to be?
_____ Not stressful
_____ Somewhat stressful
_____ Stressful
_____ Very stressful
_____ Prefer not to answer

21. Have you felt lonely since beginning your program?
_____ Yes
_____ No
_____ Prefer not to answer

22. If you answered 'yes' to question 17, please select the answer that best explains your feelings.
_____ I feel lonely most days
_____ I feel lonely sometimes
_____ I felt lonely when I first started my program, but now I do not feel lonely
_____ Prefer not to answer

23. Would you be interested in participating in a one-on-one, in-person interview as a second part of this research project?
_____ Yes
_____ No

*Note added to question- If you respond with 'Yes', please e-mail student researcher, Cinthia Albuquerque, at albuquec@mcmaster.ca to express your interest in participating.

Appendix B- Interview Questions

1. What has your experience been so far at Conestoga College?

2. What have been some of the challenges with studying in Canada?

3. What has been your biggest success with studying in Canada so far?

4. Which activities or services have helped you the most with studying at Conestoga College?

5. Why have those particular activities or services helped you?

6. Have you experienced any emotional difficulties since beginning your program? If so, what types of difficulties?

7. What other activities or programs could be offered by Conestoga College to help you with your transition to Canada?

8. Do you have anything else to add?

Appendix C- Online Survey Data

1. Current student status	Full-time- 52 Part-time- 1 Incomplete- 4	
2.Ethnic background and/or country of origin	India- 40 Philippines- 2 South Korea- 2 Saudi Arabia- 1 Brazil- 1 China- 1 Colombia- 3 Vietnam- 1	
3. Year of program	Year 1- 33 Year 2- 17 Year 3- 0 Year 4- 1	
4.Length of time in Canada	5-8 months- 33, 9-12 months- 7, over 12 months- 11	
5.Known Services (These items are aggregate and multiple items could have been entered by the same candidate, which can account for many of the services being named by only one or two individuals. This can represent the lack of awareness of the services by the majority of the participant.)	Conestoga Students Inc. (CSI)- 51, Career Hub- 7, Breathing Space- 5, Library- 5, Mental Health Services- 5, Counselling- 4, International Office- 4, Student Engagement- 4, Events (unnamed)- 3, Food Bank- 3, Gym/Recreation Centre- 3, Housing- 3, Learning commons- 3, Transportation- 3, Welcome Centre- 3, Health Insurance- 2, IT- 2, Student Services- 2, Orientation- 2, Bookstore- 1, Conestoga student Association- 1, D2L / eConestoga / MyConestoga- 1, Information Desk- 1, Open access lab- 1, Study Permit help- 1	
6.Attended Program Orientation	Yes- 46	No- 6
7.Attended Conestoga College International Student Orientation	Yes- 41	No- 11

8.Attended other activities besides Orientation	Yes- 40:	No- 12
9.Participation in number of activities	2-4 activities= 24, 5-7 activities= 6, 8-10 activities= 2, 10+ activities= 2	Blank = 18
10.Other activities besides orientation (multiple select and "other" as open-ended contribution option)	Parties (not disclosed which ones)- 15, Leadership Conference- 11, Conversation circle/Café- 10, Niagara Falls Trip- 10, Life Skills Workshops- 8, Clubs- 7, International Student Advisory Council- 6, Leadership Ambassador Program- 5, Mental Health Workshop- 5, Volunteering- 3, Start up Student workshops- 3, Chicopee Park- 2, Trips (festivals)- 2, Recreation (hockey, skating)- 2, Research workshops- 2, Global Citizen Workshop- 1, Environmental Open Forum- 1, Prefer not to answer-	
11.Reason for attending activities through Conestoga College	To get more involved with Conestoga College- 18, Experience more parts of Canadian Culture- 7, Add to my resume- 5, Practice language skills- 5, To make new friends- 4, My friends wanted me to go- 2, Requirement to fill out application- 1	
12.Reason for not attending activities	Did not have time- 15, Prefer not to answer- 14, Did not know about any activities- 7, Did not feel comfortable attending- 4, None sounded interesting- 4, Could not afford- 1	
13.Activities attended that were not offered	None- 25, Recreational Activities (unspecified)- 2,	

through Conestoga College	Festivals/ Celebrations- 2, Volunteering- 2, Video Making- 2, Toastmaster- 2	
14.Contact with family/friends (back home)	Everyday- 22, 1-3 days per week- 9, 4-6 days per week- 9, less than once per week- 8, prefer not to answer- 2	
15.Family within 25km	Yes- 10	No- 40
16.Visit with that family	Every day- 6, 2-4 times a month- 3, Don't visit- 1	
17.Change in eating habits	Yes: more- 16, less- 29	No- 5
18.Change in sleep	Yes: more- 11, less- 20	No- 7; Prefer not to answer- 1
19.Emotions following communication with family/friends	Sad, I miss them greatly- 16, Stressed, because I feel pressure to succeed and do well to help them- 17, Happy, I get to share my experiences with them- 23, Happy, I like hearing how they are doing- 17	Other: -guilty- 1 -exhausted- 1
20.How stressful is the move to canada	Very Stressful- 10, Stressful- 14, Somewhat Stressful- 19, Not Stressful- 6	
21. Lonely since beginning program	Yes- 31	No- 18; Prefer not to answer- 1
22. Recurrence of loneliness	Most days- 13 Sometimes- 12 First began program, but no longer feeling lonely- 5	