FOOD INSECURITY AMONG RACIALIZED INTERNATIONAL STUDENTS

A Thesis Submitted to the Committee on Graduate Studies in Partial Fulfillment of the Requirements for the Degree of Master of Arts in the Faculty of Arts and Science

TRENT UNIVERSITY

Peterborough, Ontario, Canada

Sustainability Studies M.A. Graduate Program

January 2022

ABSTRACT

Food Insecurity Among Racialized International students

Akua S. Agyemang

The notion that food insecurity only occurs in the absence of food is prevalent in society. This perception is too narrow and insufficient to capture the diverse manifestations and experiences of food insecurity. In this thesis, I adopt a more expansive approach to examine food (in)security through the lenses of adequacy, quality, and availability of culturally relevant food. I look specifically at the experiences of racialized international students from diverse backgrounds, to empirically ground this approach to understanding food (in)security. Drawing on both quantitative and qualitative data, this study explores the perceptions and real-life experiences of racialized international students who study at Trent University and University of Toronto. These two institutions were selected based on cultural diversity and variation, proximity to culturally appropriate food and the cost involved in accessing culturally appropriate food. Beyond that, I examine structural and policy elements that may be exacerbating the challenge of food security among this category of students. Clearly, issues related to food insecurity and hunger within all spatial configurations are urgent, however, there is a scarcity of literature that zeroes in on the experiences of racialized international students specifically.

In the wake of the dramatic internationalization of post-secondary Canadian schools, issues of foreign students' welfare cannot be overlooked, hence, I narrowed my research lenses to study the character of racialized international students' inadequate access to culturally appropriate food. Upon analyzing the survey data gathered from 107 racialized international students coupled with semi-structured in-depth interviews with 8 racialized students, I found evidence that culturally appropriate foodstuffs were not abundant in supply for racialized international students.

Consequently, the low supply of this category of foodstuffs translates into higher levels of prices which deter racialized international students from making adequate purchases to meet their taste and preference. As part of the findings, the students mentioned that the high cost of tuition, as well as other school-related expenditures are structural policy barriers that leave them with meagre amounts of income to spend on culturally appropriate food items. Under such circumstances, racialized international students are left with the option of purchasing fewer quantities of culturally relevant foodstuffs that meet their daily nutritional requirements. The study further revealed that the challenge of food insecurity poses a threat to the academic achievement and psycho-social well-being of affected students.

In addressing these challenges, I propose that the government as well as the school authorities should consider reducing the tuition fees to lessen the financial burden on students. Apart from that, stocking grocery stores and creating culturally appropriate food supply centers in and around school campuses may be helpful. Also, the international offices of universities should intensify welfare programs that entail periodic needs assessment of international students. This will offer the school authorities timely support services to students as and when it is needed. In conclusion, I wish to state that this study seeks to add to the recently growing strand of literature that examines the intersectionality between internationalization of post-secondary schools and food insecurity. The findings provide important and preliminary evidence underpinning the experiences of racialized international students with the phenomenon of food insecurity, thereby providing a point of departure for additional research on the broader nature of intersections between food insecurity and racialization.

Keywords; Food insecurity, Race, International students, culture, Trent, Toronto, Canada.

ACKNOWLEDGEMENT

Gratitude they say is the least of all virtues but the neglect of it is a great vice. I want to first thank God because he has been good and stayed with me every stage of this journey. Many people have been very instrumental in my two-year study and in this research. I am highly indebted to my supervisor and mentor, Dr Michael Classens for his unwavering support and guidance. Your timely advice, guidance and dynamism throughout my two-year study has been one of the most positively challenging experiences of my life to accomplish this task. Thank you for the opportunity to explore this topic and expand my limits in the pursuit of excellence.

I would like to express appreciation to my research committee members, Dr Momin Rahman and Prof David Firang for their comments and instructions which were vital in helping me to accomplish this task.

I am also grateful to Trent University and the Graduate school of studies for granting me the opportunity and financial support needed for me to achieve my academic goal at the master's level. Another thanks to all my professors including Prof Asaf Zohar, Prof Tom Whillans and my classmates who came together to help shape my ideas in this research.

To Emmanuel Quarshie and Edwin Sosi, thank you for the constant support during this research project. When writing gets tough, your encouraging words push me to do better.

To all international students who participated in this research, international offices with individuals and lecturers at both Trent University and University of Toronto who assisted me, I am more than grateful to you.

My undying thanks to my family. My father, Mr. Richard Agyemang. Anything I achieve today and forever will be attributed to you; never will I be able to pay you back for your unending support. To my mother, Mrs. Salome Agyemang and my siblings Eugene, Rhoda, Ama Owusua and Gloria Agyemang, I am grateful.

Table of Contents

List of Tables

List of Tables

Positionality Statement

Factors such as my social location, personal life experiences and cultural background influenced my position in this research project. I have various life experiences that influence my positionality. I identify myself as a young, Black, middle-class Ghanaian, Christian woman who is pursuing a master's degree at Trent University. Having been nurtured in a safe, stable, and supportive environment enabled me to develop a great sense of purpose in life. I believe my previous experiences from childhood contributed massively to my sensitivity and awareness of societal needs that require human interventions. My personal values and beliefs internalized from my country influence both *what* and *how* I research.

Prior to my migration from Ghana, I was not sensitive to the concept of racial distinctions, because almost all Ghanaians are Black, hence discussions about race are not topical in my home country. That notwithstanding, my transition to Canada made me appreciate the richness of diversity, in terms of race, and the need to meet the needs of people from all racial divides. Becoming part of a cohort of international students some of whom are racialized made me gain a deeper understanding of living in a racially diverse society. As a racialized international student, I consider myself an insider relative to my research project. Being an insider gives me a deeper understanding about the research and the phenomena being studied. My subjectivity and personal views inevitably inform the research process. Again, being a new immigrant in Canada for the first time and experiencing a different culture makes me an outsider too. My experience as an outsider is different from many other international students because international students come from a wide range of countries, backgrounds, religions among others. Although I may not have greater knowledge about the culture here in Canada, I believe identifying both as an insider and outsider

has helped me to gather the data with “open eyes” and not only assume that I already know everything about the phenomena being studied.

I studied Geography and Resource development with Psychology during my undergraduate studies at the University of Ghana. Living on campus in one of the halls broadened my understanding of ‘life away from home”. I also took leadership roles as a course representative and as the head of some students’ organizations in school. I had the opportunity to interact more with students to listen to their challenges and support them with various social and academic problems they encountered. These experiences from school contribute to why my research interest is focused on food insecurity issues among students, particularly racialized international students.

My previous work as a research assistant at the Centre for migration studies after my undergraduate studies equipped me with a variety of research skills. My experience was a good one; collecting qualitative and quantitative data helped me to gain an appreciation of key problems in my society. This experience provided me with the knowledge and skills required to apply rigorous methodology with existing theoretical frameworks in order to achieve desired research objectives. I intend to build on this experience to produce a methodologically robust, theoretically rich and policy-driven research paper, written in accessible language to all categories of readers. My study therefore seeks to focus on the issue of food insecurity among racialized international students.

CHAPTER ONE

INTRODUCTION

1.0 Background of Study

Food insecurity is an acute and escalating crisis throughout the world. It is therefore not surprising that the second Sustainable Development Goal (SDG) of the United Nations seeks to end hunger and ensure all-year round access to safe, nutritious and sufficient food by all people[1]. Inarguably, sufficiency is conditioned on the supply of preferred foodstuffs, and this renders the unavailability of culturally relevant food a challenge to this global goal. Aside from that, it is an undeniable fact that the attainment of this global objective is highly connected to the third and fourth SDG's which highlight good health and well-being as well as the promotion of quality education around the globe. In other words, good health cannot be attained in the absence of quality food that meets the nutritional demands of society. Moreover, since it takes good health and physical energy to study efficiently, students who are food insecure may not be able to engage in effective academic activities. Even though food insecurity is a growing challenge with serious academic and classroom consequences, the depth of research on the issue within the post-secondary setting is minimal (Bruening et al, 2017; Maynard et al 2018; Nazim et al, 2019; Roberts, 2020). With food being a necessity without which even the strongest person can be rendered unproductive and unhealthy, it is fair to conclude that food insecure university students will face more challenges in the classroom than their food secure counterparts (Molcan, 2019).

[1] https://sdgs.un.org/goals

A gap that calls for attention is the fact that society sees food insecurity as a global humanitarian problem, yet less is known about the dynamics of the situation among racialized international university students; the rates, experiences, and impact – are dynamics begging for evidence-based scrutiny. Given the fact that Canada as a country is not exempted from this common global challenge, I address this gap by exploring the experiences of racialized international university students. This research delves deeper into the intersections of race, ethnicity, gender, and other factors that may render international racialized students highly susceptible to the food insecurity challenge. The gathering and careful analysis of data offers researchers, policy makers, international observers, as well as the general citizenry a greater appreciation of the details of the situation to inform responses to this urgent issue.

On campuses, some of the perceived barriers to food security include high tuition rates, inaccessibility, and lack of culturally preferred food (Maynard et al, 2019). As a result of these hindrances, food insecure students often are forced to make the difficult decision of forgoing meals to save enough money to finance their education (Maharaj, 2019). Interestingly, previous studies in different jurisdictions offered evidence of differential impact of food insecurity among students with different background characteristics. For instance, a study conducted in the United States showed that African American students and multiracial students are more likely to experience food insecurity than white students (Marota, 2013). In the light of the aforementioned evidence, it is worth investigating if similar differential impacts are experienced among racialized international students. The intensity of the impact of food insecurity as well as the challenge of tough choice-making may be prevalent among racialized international students because they pay higher amounts of tuition fees. As of 2020, the average international undergraduate students in Canada pays 4.9

times higher the amount paid by their domestic counterparts, hence it is anticipated that international students will face tighter budget constraints (Statistics Canada, 2020).

Previous studies undertaken in Canada, Australia and the United States show that students who are susceptible to food insecurity use coping strategies such as food and income management and social community support to have access to food (Hughes et al. 2011, Patton-López et al. 2014, Farahbakhsh et al., 2015). Also, emergency food hampers or food items from food banks on campus provides students an option to cope with food insecurity (Farahbakhsh et al., 2015). Currently, most postsecondary institutions in Canada have some form of emergency food provisioning on campus, and this could be a result of increased financial pressures students encounter in pursuing higher learning (Silverthorn, 2016). The higher numbers of international students who seek emergency food aid provides a basis to assume that food insecurity is common among cohorts of international students in Canada (Hanbazaza et al., 2017).

During periods of shortfall in emergency food supplies, students are more likely to increase their pace of adherence to coping strategies. Unfortunately, it has been observed that such coping strategies tend to negatively affect student's health, academic performance and employment opportunities in the future (Hughes et al. 2011; Patton-López et al. 2014). As indicated by Coleman-Jensen et al. (2015), under worst case scenarios, the only option left for international students who lack food that suits their needs, is to drop out of school and go back to their home countries. It is at the back of this happenings that my research seeks to cast more light on the dynamics of food insecurity as it occurs among racialized international students at Trent University and University of Toronto. In doing this, the following research questions will be addressed:

a) To what extent do racialized international students face food insecurity?

b) What structural and policy elements contribute to food insecurity among racialized international students?

c) What specific challenges do food insecure racialized international students face?

d) What solutions are viable in helping food insecure racialized international students?

1.1 Statement of Problem

There is the general understanding that access to education provides rewarding and prosperous opportunities by improving human and social capital (Fentima, et al, 2004, Booth & Smith, 2001). Studying abroad is an exciting goal for many international students across the world. International education and the global flow of postsecondary students is on the rise as the global community is interconnected more than ever. However, with the implementation of neoliberal policies that have tended to result in reduced public funding for education, universities may consider internationalization as an opportunity to generate ample funds to sustain their operations. Figures obtained from the International Organization for Migration (IOM) revealed that the number of international students rose from 3,961,200 in 2011 to 4,854,346 in 2016 representing a 22.5 increment within the five-year period (International Organization for Migration, 2020)[2].This substantial increase in the number of international students demonstrates both an appetite among students to study abroad. As I demonstrate below, this can be attributed to the neoliberal policies adopted by Canadian universities. Despite the positive social and economic contributions that international students bring to both the host and home countries, we know little about a crucial

[2] https://migrationdataportal.org/themes/international-students

vulnerability, food insecurity among racialized international students. Food insecurity has adverse effects on student's health and academic performance, hence obtaining adequate information about the phenomenon is very important (Hanbazaza et al, 2017). While food insecurity among university students remains thoroughly under-researched, much more is known about food insecurity and its adverse effects on academic results among elementary and high school-aged students (Chaparro et al, 2009).

Access to quality, nutritious, affordable and diverse food options on campus continues to be an issue for international students across Ontario. The "starving student" discourse normalizes student food insecurity and masks the fact that almost 40% of students suffer moderate or severe food insecurity (Feed opportunity, 2019). Research conducted in the past shows how university students may not confess themselves as food insecure, but in reality, they may be facing challenges of fending for themselves (Henry, 2017). The growing understanding that food insecurity presents a serious challenge for today's postsecondary students highlights the need for additional research to better understand this problem and explore effective solutions. Racialized international students are a unique understudied population and their experiences of food insecurity differ from other student populations in Canada. While access to food is considered as a fundamental human right, culturally appropriate food is usually not considered as a priority. Cutting off one's consumption of his/her traditional food which is considered as an inherent part of an individual's cultural identity can be a very overwhelming experience for many international students.

There is a lot more to unpack about the interaction between culture and racialized international student food insecurity. Food holds symbolic meanings to individuals and communities (Pine and De Souza, 2013). International students are shown to be more vulnerable

to food insecurity, especially during the early period of their stay (Hanbazaza et al, 2017). Many students place importance on culturally relevant foods but experience barriers in accessing and/or affording them (Maynard et al, 2018).

In order to probe these issues, this study, (a) examines the extent to which food insecurity exists among racialized international students and (b) documents the lived experience of food insecure racialized international students from both Trent University and University of Toronto. The knowledge to be gained in understanding racialized international students' experiences of food insecurity and how this may differ from what is already known about food insecurity is necessary to designing interventions and policy reforms to effectively address food insecurity among the international student community in Canada.

1.2 Research Objectives

The specific research objectives of this project are to:

a) Investigate to what extent food insecurity exist among racialized international students
b) identify the structural and policy elements that contribute to food insecurity among racialized international students,
c) Examine the lived challenges of being food insecure,
d) Explore solutions to food insecurity among racialized international students.

1.3 Significance of Study

The findings of this study provide insight regarding food insecurity among racialized international university students in Canada. International students are considered to be key partakers of the university environment, however, previous studies did not specifically zero in to

focus on issues pertaining to access and availability of culturally appropriate food for this category of students. Clearly, this study seeks to address this gap, thereby adding a unique dimension to the very minimal body of scholarship focused on food insecurity among racialized international students. The findings of this study come in a timely manner, where educational institutions are adopting welfare strategies that will promote the growth and development of international students, amidst the current Covid-19 pandemic era. The insights drawn from this study will inform the determination of university-based programs needed to improve food security among racialized international students in Canada.

Periodic evaluation of the food security status of international students is instrumental in the adoption and implementation of school policies that hinge on food security for all, hence, I am optimistic that the outcome of this study is relevant in promoting data-driven and evidence-based policy making at the school and national level. Such policies might help safeguard international student food security by ensuring that student food markets are well-advertised, available and accessible to international students. Given the relevance of the study and its unique place in literature, I am hopeful that the findings of this study will spark a high-level discourse on the issue under consideration and by extension, inform policies that will aim at promoting the welfare of international students in Canada and beyond.

1.4 Organization of Study

In addition to this first chapter, this thesis consists of four remaining chapters. Chapter two presents a review of literature related to food insecurity among racialized international students. Here I triangulate between three bodies of scholarship that center on food insecurity, neoliberalism,

and racialization. This chapter provides the theoretical framework underpinning this study and establishes the conceptual parameters of food insecurity that looks beyond the issue of absence of food. Chapter three covers the research methodology. It presents the research design, methods and approaches undertaken in this study to test the objectives under consideration. It also looks at the data collection method, procedure, and instruments used. Chapter four presents the key findings of the study and also addresses limitations of the study. Here, I discussed the evidence generated from the analysed data and I explain how it is related to the research questions that shaped the scope of this study. In chapter five, by way of conclusion, I provide some recommendations based on my findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical and Methodological Framework

In this chapter I provide an orientation to the conceptual frameworks upon which this project is based. I situate racialized international student food insecurity within two discrete but overlapping conceptual frameworks; (1) the neoliberalization of postsecondary education in Canada, and (2) racialization and food. Given the complexity of the term – and my desire to introduce cultural relevance in the discussion – I first sketch the contours of scholarly understandings of food insecurity.

2.2 What is Food Insecurity

The concept of being food insecure has changed over time. These changes are induced by reflections on national and global needs over the years (FAO 2002; Henry 2017: 13; Himmelgreen and Romero-Daza, 2010). According to Maxwell and Smith (1992) there were over two hundred (200) definitions for food insecurity by the 1990s.

Currently, Health Canada defines food insecurity as "the inability to acquire or consume an adequate quality diet or sufficient amount of food in socially acceptable ways, or the uncertainty that one will be able to do so" (Health Canada, 2012). The USDA in 2006 modified the way it considered food insecurity by doing away with the word "hunger" from its research on food insecurity (Carney, 2014). From 2006 onwards, the USDA understood hunger to be an entirely different and unique concept outside food insecurity. Hunger was simply defined as the physical

experience arising from the lack of food. Decoupling of the term "hunger" from the definition of food insecurity has given a response to the limitation on the ability to measure hunger objectively and the attempt to depoliticize food insecurity as a concept (Allen, 2007; Hearing and Syed, 2009:13).

As the concept of food insecurity is revised, the context of "enough food for an active healthy life" (FAO, 2003) shifted to the consideration of food preferences, safety, and nutrition. In contemporary times, an accurate and exhaustive definition of food security implies that "all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life (International Food Policy Research Institute, 2021).

Current conceptualizations of food insecurity look at two important aspects – access and sufficiency. Access is meant to capture the lack of resources to obtain food, one's proximity to food, difficulty in acquiring food, and time constraints in accessing venues to acquire food (Jablonski et al., 2016). Sufficiency attends to the quantity of food and type of food a person may need. It considers the amount of food available to someone, how nutritious the food is and the level of quality of the food (Knol et al., 2017). Alaimo (2005) also intimated that food insecurity goes beyond unavailability of food substances, however, the phenomena also hinge on the assurance and certainty of the availability of preferred nutritious and healthy food substances. Given the aforementioned revelation, it suffices to mention that lack of guarantee or assurance of getting access to one's preferred food item may amount to food insecurity, hence it was not surprising that the findings of his study revealed that approximately 13 million American children and 23 million adults live in food-insecure households.

Over the years, the definitions of food security continue to change to accommodate the reality of our ever-evolving society. Contemporary definitions have shifted beyond issues of quantity to incorporate requirements of quality, nutritional components, and suitability of available food for people from diverse cultures. Rychetnik (2003) therefore opined that food insecurity refers to not having access to sufficient food; going hungry as a result of running out of food and not being able to afford more; eating a poor-quality diet as a result of limited food options; or having to rely on food relief.

Many circumstances may render people food insecure and there are many pathways to becoming food insecure. However, there are some groups of people that are at greater risk of food insecurity than others. An example could be drawn from a study in 2012 which found that the group most likely to be food insecure are single Hispanic and Black women in universities (Adamovic, 2017).

A critical examination of the situation of international students revealed that financial constraints, need to create new social networks, acquisition of new language skills are but just a few of the challenges that international students face (Hsieh, 2007). Notwithstanding the fact that diverse factors expose people to food insecurity, the cultural aspect of food ought to be recognized as a key predictor especially among racialized international students living independently away from home. Though culture strongly influences food and eating, culture has, strangely, only more recently been integrated into understandings of food insecurity. A recent publication by Wright et. al. (2021) shows that inadequate access to cultural foods among second-generation American student populations may cause cultural stress, which in turn leads to feelings of identity degradation, anxiety, stress and depression. Forestalling such challenges therefore necessitates the need to beef up proper support structures that focus on the dimension shaping the supply of

incorporation of culturally relevant foods on campuses. In examining issues pertaining to availability of culturally relevant food, the quest to satisfy variety demands was equally recommended (UBC Wellbeing, 2017). Given the findings, it suffices to propose that food insecurity – without considering the cultural contexts – paints an incomplete picture.

Two points are worth underscoring here. First, there is a cultural relevance dimension to food insecurity, yet this has not been highly appreciated and acknowledged by many. Second, there is evidence that racialized people disproportionately experience food insecurity, and we can anticipate that this holds true for racialized international students. It is against this background that I seek to shed more light on the challenge of food insecurity among racialized international students.

2.3 The Implementation of Neoliberal Education Reform and its Intersection with an Increase in Market Demand for International Education

As part of the need to understand the issues associated with racialized international student food insecurity, one needs to have an appreciation for the political and economic trajectory that has resulted in international students becoming such prized "commodities" for universities in Canada and beyond. To start with, it is worth noting that the competition to attract and recruit international students has become keen in recent years. Four decades of implementation of neoliberal policies and state divestment from post-secondary education has created significant funding gaps in Canadian universities, and these gaps are largely filled by tuition fees, more specifically international student tuition fees.

The ascendency of neoliberalism in the 21st century is marked by privatization, deregulation and promotion of laissez faire practices across many sectors of the economy (John, 2010). As noted by Robson (2019), neoliberalism is the ideological belief in the reduction of public spending and the promotion of reliance on private enterprises within the global economy. Davidson-Harden and Hartwell (2006) also described neoliberalism as both an analytical construct and framework that emphasizes market mechanisms as modes of governance in capitalist environments. In describing the concept within the scope of education, they state that neoliberalism led to the process of commodification and marketization of education. In essence, the so-called invisible hand of demand and supply controlled access and pricing of goods and services.

The privatization and subsequent pricing of educational services was further reinforced by the ratification of the General Agreement on Trade in Services (GATS) (World Trade Organization, 1995). This decision essentially liberalized education across the globe; higher education was broadly recast as a priced service or commodity that is bought rather than a public good that ought to be accessed by all that need it. Schuetz et. al. (2011) revealed that neoliberal social policy became operational in the Canadian context as far back as the late 1990's after England and the United States experimented with the project early on. The authors mentioned that the implementation of neoliberalism was characterized by a drastic reduction in federal transfers that were allocated to provinces. Consequently, austere fiscal measures adopted by the federal government led to reduced levels of funding for all levels of education within Canada. Further, this translated into a shift of power in terms of management and how to raise funds to finance educational institutions. School authorities as well as school boards and private individuals became the key decision makers in this regard.

The decreasing per-student amount that is provided for by the central government necessitated the need for post-secondary institutions to raise revenue from other sources, else, their survival and operations would have been hindered. According to Robson (2019), the most obvious indicator of the neoliberal policy on campuses is the reduction in federal funding for post-secondary institutions and an increased dependence on tuition fees as a key source of revenue. He observes that this practice has translated into an increase in tuition fees over the years. A similar observation was made by Weiner (2003), who also stated that the increased incidence of fundraising by K-12 public schools is an indicator of privatization in public schooling. The cut in public funding has been blamed for the consistent increase in student tuition fees, ballooning of student debt and deteriorating conditions on campus staff (Harden, 2017). Harden further underscores that the marginalized population which entails students with disabilities, queer or transgender students, cleaners, seasonal instructors, racialized students and international students are affected the most. With respect to the impact of neoliberal reforms on the financial welfare of international students, he asserts that "international students who were already used as cash cows in the 1980's, suffered relatively larger tuition increases" (Harden, 2017, p.6) than their domestic counterparts. He underscored the historical input of international students' key contributors to the revenue stream of universities, hence, the adoption of the neoliberal policy further led to an increase in the recruitment of international students from the 1990's onward. This period of an increase in internalization was equally associated with a surge in the tuition fees of international students.

The 21st century is characterized by globalization, knowledge sharing and increase in demand for international education. Interestingly, selected few countries in the developed global

north have been the key drivers and suppliers of international education. As of 2014, Canada was ranked 8th in terms of destination countries that host international students, falling behind the United States, United Kingdom, France, Australia, Germany, Russia and Japan (UNESCO,2014). Van der Wende (2001) observes that many post-secondary Canadian educational institutions are actively engaged in internationalization. With the increase in demand for international education within the Canadian context came with rising levels of tuition fees for international students. Farquhar (2001) identified economic gains as one of the key rationales that drives the internationalization of Canadian schools. Earlier, Woodhall (1978) noted that recruitment of international students and requiring them to pay a fee differential is an avenue through which universities generate revenue. In a similar vein, Altbach and Knight (2007) also reiterated that charging of differential fees as well as the relatively low cost of engaging international students as teaching and research assistants are key motivations for admitting international students.

Evidence gathered from Statistics Canada reveals that average tuition fees for all students rose by 40% from 2006 to 2016 (Statistics Canada, 2016). Owing to the fact that international students pay higher fees than their domestic counterparts, it is quite obvious that any appreciation in the cost of fees will have a relatively higher adverse impact on the financial welfare of international students. Further statistical evidence gathered recently indicates that on average, both international graduate and undergraduate students pay higher amounts of fees than their domestic counterparts.

Specifically, whilst the fees for domestic undergraduate students rose from $6,375 in 2016 to $6,580 in 2020 (representing a 3.2% increase), the fees of international undergraduate students rose from $23,677 to $32,019 in the year 2020, representing a 3.5% increase (Statistics Canada,

2021). The figures quoted above indicate that as of 2020, the average international student pays about 4.9 times the amount of fees that are paid by domestic students. Similarly, within the 2020/2021 academic year, Canadian graduate students were billed with an amount of $7,304 whereas the average international graduate student fees stood at $19,252, which implies that the bill of international graduate students was 2.6 times the amount paid by domestic students.

The constant rise in the tuition fees of international students has led to a recent campaign and calls for a reduction in fees to promote the welfare of foreign students and by extension, attract more students whose presence helps Canadian universities to realize their internationalization and diversity objectives. Recently, international students from the university of Guelph, with support from the Central Students Association and the International Students Organization are drawing the attention of stakeholders through a petition that the Covid-19-pandemic has exacerbated their pre-existing financial plight, hence the need to halt an intended increase of tuition fees (Erudera College News, 2020). In advancing an argument to support their demand, the petitioners mentioned that the majority of international students come from developing or undeveloped nations, hence, and note that their financial situations have been worsened by the global pandemic. The petitioners made an appeal to the government and other relevant stakeholders to help them with interventions that will abate their worsening financial conditions with interventions in the form of scholarships, grants and other welfare supports to stabilize international students amidst the current global pandemic. Furthermore, in their report Education For All, the Canadian Federation of Students (CFS) affirmed that increases in tuition fees are the results of successive provincial governments divesting resources from public post-secondary education resulting in institutions turning to differential fees as a strategy to generate revenue. The student federation underscored that ballooning tuition rates due to the implementation of policies that cut down

federal support for post-secondary school places financial burden on students. The report of the CFS describes international students as "cash injections for a starved system, instead of people with valuable experiences who enrich campuses and communities" (Canada Federation of Students, 2019, p.5).

Interestingly, a previous study by Harden (2017) revealed that international students may be coming from low-income families, hence continuous increase in tuition rates may expose them to acute financial hardships. Given that such students may be hailing from less privileged backgrounds, the desire to improve their human capital through the acquisition of valuable international education may be the push factor that motivates their families to squeeze their financial resources to support them. While it remains true that some international students may come from privileged backgrounds, the recent outbreak of the Covid-19 pandemic and its resultant impact on almost all households will obviously create some level of financial risk to most international students. For instance, a recent survey conducted by the National Union of Students of the United Kingdom which captured 9,872 responses revealed that the finances of 80% of the participants have been affected negatively by the Covid-19 pandemic (Lane, 2021). The students captured in the survey particularly raised concerns about the challenge of paying tuition fees, accommodation fees and other basic needs. Within Canada, the story is similar, with some international students raising concerns that their finances have been affected adversely by the Covid-19 pandemic (CBC News February 28, 2021).

In summary, market driven neoliberal policies have resulted in intense upward pressures on international student tuition fees. This line of reasoning resonates with the tenets of the theory of demand as well as the theory of consumer behaviour, which postulates that consumers make sacrifices in their bid to allocate their resources along the same budget line. In line with the basic

principles of consumer behaviour, an increase in the price of a good that occupies the top spot of one's scale of preference will lead to a reduction in the budget allocation for other resources – in other words, given the scarcity of money, higher tuition rates leave less money for food. Moreover, since paying one's tuition fee is a primary requirement that guarantees residency as an international student, most students may prioritize the payment of their tuition fees ahead of allocating their meagre financial resources for other needs, including culturally relevant foodstuffs. The need to make economic choices with the scarce resources of racialized international students sets the stage for the next review which focuses on food insecurity and its impact on students' welfare.

2.3.1 The Challenges of International Students and Cultural Adaptation.

The challenges faced by international students in their bid to get accustomed to new environments are multi-faceted, ranging from financial constraints, language adaptation challenges, cultural adaptation, among others (Sherry et. al., 2009; Wu et. al., 2010; Bui 2016; Chen et. al., 2019; Tsevi, 2019). Despite the numerous challenges that are faced by international students, the unavailability of culturally relevant food items may be glossed over, in that most people presume that the general food items available in university campuses and supermarkets will be sufficient to ensure food security. On the contrary, the availability of general food items may not necessarily satisfy the longing and preference of this category of students. Studies demonstrate that access to familiar and healthy home country food is vital for the nourishment, academic performance and general well-being of international students studying in the US (Brown et. al., 2009; Garden-Robinson et. al., 2010).

Leo, Gao, and Kim (2015), whose research focused on acculturation and changes in dietary behaviours among Chinese international students who were pursuing graduate studies in South Korea observed the challenge of inconsistency in mealtime and amount of food available to students. The trio found that lack of access to some preferred Chinese dishes partly contributed to unhealthy eating patterns among the students who were studying out of their home-country. In a related study, Hartwell, Edward and Brown (2011), focused on acculturation and food habits among European and Asian students enrolled in the University of South England. In their view, paying greater attention to food orientation will help to alleviate the "longing for home feeling" among international students. As part of their findings, they proposed that a "push-pull" model towards food choice should be utilized to unearth how individual, cultural and external factors shape students' food orientation behaviour. Through such needs assessment techniques, school authorities are positioned to understand the complexities of food choice-decisions, and accordingly design interventions and strategies that will address the needs of students from diverse backgrounds. Organizing activities such as cooking clubs and participatory inter-cultural culinary activities were among the recommended interventions that offered international students a welcoming international education experience.

Beyond this, Martinez-Ruiz et al (2015) asserted that there is a correlation between food purchasing decisions and cultural adaptation. It was mentioned that sustainable production, appearance, and accessibility were some factors that affect purchasing decisions and dietary practices among international students. This suggests that if food items do not match the standard that international students are used to, they may not be willing to spend their scarce dollars on such items. Under such circumstances, the students involved may be deemed food insecure because of their lack of access to their preferred food. This was reinforced by Benefield (2019), who stated

that international students would not purchase a sufficient quantity of food items if the available stock does not match the standard of what they are used to having. In situations where culturally appropriate foods are not available, racialized international students may be forced to resort to the consumption of "junk" food items that may not augur well for their health and development (Leong, 2013). As indicated by Hanbazaza et. al. (2017), the issue of fewer financial streams at the disposal of international students may restrict them from opting to either import or try to access culturally relevant foodstuffs at a higher price. Unsurprisingly, coping strategies like skipping meals or eating less than the required proportions may be the options available for international students.

2.4 Racialization and Food (In)Security

2.4.1 Conceptualization of race and class within the context of food systems

The role of race, class and ethnicity has played a key role in public discourse on key developmental agenda with some key views and theories dominating this space. This has made the scholarship on race and racialization more fixated on the notion that the concept remained a social construct (Inwood and Martin 2008; Melamed 2006; Hoelscher 2003; Nash 2003; Delaney 2002; Holloway 2000; Omi and Winant 1994). This line of reasoning argues that ideas about race are historically created and contemporarily recreated, enforced and manifested through everyday actions (Marable 2002). There are many symptomatic examples highlighting the issue of racialization in our North American society. By beginning to trace a path through the tremendous literature on racialization, we can see that racialization and food systems' change are not separate issues. "The right of all people to freely determine their political status and freely pursue their economic, social and cultural development"(Daes 1993, p.1) including the elimination of hunger

and malnutrition has been conceded in so many declarations and international conferences: the Declaration of Principles of the World Conference on Agrarian Reform and Rural Development (1979), the International Conference on Nutrition (ICN), the World Declaration on Nutrition (1992). However, despite this chorus of ambitious proclamations, food insecurity continues to affect many low-income people, particularly people of color especially in the US (Slocum, 2011), demonstrating that the impacts and experiences of racism and food insecurity continue to persist. In Canada, Black people are 3.5 times more likely than their white counterparts to experience food insecurity (Daewuo, 2019).

As efforts to interrogate race and class continue, it is obvious that to "critically engage with race and class requires an inter-and-multidisciplinary effort" (Nash 2003, p. 638) focused on the multi-layered and contested nature of racialized identities. Much of the current work on race in the social sciences is informed by and through an anti-essentialist agenda that seeks to deconstruct race as a naturalized hierarchy of distinctive human groups while exploring processes of racialization which place individuals and groups within racial categories and have material effects in terms of the unequal distribution of power and wealth (Nash 2003, p. 639). Racialization and discrimination appear be more institutionalized in America (Elsheikh & Barhoum, 2013), such that from the advertising industry (Guerra, 2020), through the media landscape (Wilder, 2020), educational sector (Hagerman et al, 2020) and in the sports industry (Haslerig et. al., 2020), racialization is very much alive. Education is often thought of as a great equalizer, one that generates opportunity rather than diminishes it. However, when we look through a critical lens at the heritage of Western education, links between racial, cultural, class and gender discrimination pervade its foundation and present-day trajectory (Sears, 2003). If education is to be a cornerstone

of betterment, then we need to be critical of what outcomes are observable in the society it is producing.

Within the context of racialized international students who form a minority group, however the core for this study, one clear example of how systematic racism is embedded within the food system is tracing the history of the US food system from the early struggles of the Black Panther Food Program. The Black Panther Party (BPP) tussled for social reproduction through their Black Panther Breakfast program and sought to liberate Black communities by tackling the food insecurity aspect of poverty. Black children who went to school hungry each morning was organized into an alternative. In his narration of the success of the BPP's Free Breakfast for Children Program, Heynen (2009) asserts that the program liberated Black children who hitherto went to school each morning on empty stomachs. The fact that the program was specifically tailored to Black communities, demonstrates that there was a form of food racialization against Black people before and during the period of 1969 to 1970. The BPP understood food within the context of the school system as both a key site of oppression and a possibility for liberation.

Another fragment of understanding and contributing to changes that may move us toward a more just and equity-driven food system experience, requires that we look critically at our education system. A shift in perspective may be needed for new understandings to emerge, and a focus on what more broadly an education is designed to do, is an important place to start. On the surface, perceptions around education may be that it enables us to be trained in specific ways so that we can secure livelihoods that match our personal abilities. One doesn't even have to reach far into the imagination of a kindergarten class to see these young children are already dreaming

up what they will become one day. But this outcome unquestioned, is perhaps a pivotal point for departure on what needs to change.

Sears (2003) draws our attention to the substantial reality that in Canada, education has largely been a project of citizenship formation. Sears (2003) writes that "Ontario first introduced compulsory schooling in 1871 and, since then, the imperatives of citizenship-formation have largely driven the expansion of public education. In school, the young person develops a self in relation to the state" (p. 10). But this goal of citizenship orientated toward the state begs the questions, for whom and for what ends? Sears (2003) makes clear that "the inclusiveness of social citizenship was always partial. Women, who often qualified for social programs based on their position in the household and not in the workplace, were generally relegated to a second tier of services that combined lower benefits with greater stigma (see Fraser 1989:149-52; and Scott 1996:7-8). The centrality of national identity to social citizenship meant that people of colour, immigrants and refugees were constructed as minorities and granted only some or none of the rights of social citizenship (see Bannerji 1995:7-15; and Harris 1995:5-6). Indigenous people were almost completely excluded from the rights of social citizenship - any access to those rights was made contingent on the loss of legal 'Aboriginal' status and dropping historic claims against the Canadian state (see Warburton 1997:125-7 and Purich 1986, p. 11).

Despite the practically disjointed nature of conceptualizing race, class, ethnicity and food systems within the context of racialized international students in Canada, the key concepts of race and class still occupy a central and crucial place within the research and policy discourse. To affirm this relative impetus, this section demonstrated how race, class and ethnicity played key roles in food systems within the context of Canada to show that race, class and ethnicity do play active and

interactive roles in food systems and accessibility to culturally appropriate food for that matter. The quest to promote equity and fair treatment of all persons in all areas of life, including food availability and distribution has resulted in numerous investigations that touch on the race-food security nexus. Elsheikh and Barhoum (2013) focus on structural racialization and food insecurity in the US and observe that the incidence of food insecurity is more pronounced among low-income households which are usually made up of Black and Hispanic households. A similar finding revealed that Black and Hispanic households face higher rates of food insecurity, which is substantially higher than the nationwide average of 14.9% in 2011; to be specific, 25.1% rate was registered among Blacks and 26.2% among Hispanics (Coleman-Jensen et al., 2014, p.10). Consequently, it was observed that the inadequate distribution of healthy and nutritious food among these categories of the population negatively impacted the health and general well-being of the vulnerable households of BIPOC (Black, Indigenous and People of Color). Phojanakong et al, (2019) observe that in 2018 a staggering 21.2% of Black households reported issues of food insecurity compared to 8.1% for white households. These figures mirror endemic racial disparities that may cause Black people to fall into the food insecurity web.

In their study of local food systems in the United States, Alkon and Mares (2011) also demonstrate the existence of racial and economic inequalities in terms of distribution and consumption of food. Slocum (2011) equally emphasized that experiences of racism and food insecurity persist in our society. He further intimated that the dynamics of racialization in terms of food may lead to a widening of the pre-existing inequality gap in society. In establishing his point, he cited that employment opportunities require academic achievement, and in turn, academic performance requires that students have access to quality and healthy food. In essence, when

racialized or BIPOC people lack access to adequate healthy food, they receive fewer economic opportunities, with worse outcomes, thereby exacerbating existing racial disparities.

Connecting food insecurity to racialization amidst a pandemic era, Klassens and Murphy (2020) indicated that the Covid-19 pandemic exposed the vulnerabilities of food systems within our economies. Assessing the experience of racialized agricultural migrant workers in Canada, the duo found that though food workers are key players in the economy, their nutritional needs were not met. The duo intimated that, "food insecurity both reflects and reinforces inequity". In a related study that sought to ascertain Black-White racial disparities in household food insecurity from 2005 to 2014, it was revealed that being Black was an overriding factor that exposes one to vulnerability to food insecurity. The findings show that 28.4% of Black household are food insecure, almost three times higher than White households (10%) (Klasssens and Murphy, 2020). In order to eliminate the challenge of racial inequities in food distribution and access, Elsheikh and Barhoum (2013) proposed that easing the financial burden and creating avenues to access good amounts of healthy foodstuffs among the vulnerable population are key strategies that can be used to remedy the situation. Besides that, the duo suggested the creating a strong and inclusive social system is a sure way of meeting the choice needs of vulnerable populations.

In terms of racialization of food insecurity on campuses, Vasquez et. al. (2019) report that men of color in a community college in the US demonstrate stark levels of household food insecurity. Commenting about the food welfare of vulnerable students, of which international students were part, Redden (2020) anticipated that the Covid-19 pandemic may have dire consequences on the ability of these students to access food. In arguing her case, she further mentioned that the decision of US higher educational institutions that required international

students to return to their home-countries may exacerbate their already pre-existing precarious situations. The aforementioned findings lend credence to the fact that racialization of food exists on university campuses and the society at large.

Given the current global challenges, assessing the needs of vulnerable students whose situation may have been worsened by the Covid-19 pandemic is very instrumental for the promotion of the academic welfare of students and general university learning environments (Harper, 2020). The heterogeneous background characteristics of international students implies that they will have diverse preferences for food items with some of them preferring to stick to their traditional dishes in order to maintain a connection with their home culture (Chapman and Deagan, 2013). This therefore calls for a general assessment of food distribution systems in and around universities, to ascertain whether culturally relevant foodstuffs that meet the demand of racialized international students are available and affordable. In the bid to get this information, racialized international students then become the primary sources of information through which we can ascertain whether the neoliberal practices have penetrated the food supply systems of campuses.

2.5 Negative Impacts of Food Insecurity

Food insecurity is an essential determinant of one's health (Weinreb et al 2002). This section highlights the negative impacts of food insecurity, ranging from emotional health, physical health and academic performance, with a specific focus on racialized international students.

Several studies showed that food insecurity is a contributing factor to mental health and well-being of people ((Seligma et al 2010; Hanson and Olson 2012; Benefield, 2013; Pryor et al. 2016; Knol et al. 2017). Darling et. al., (2017) also found that disordered eating, depression, stress,

and anxiety are some of the mental health issues associated with food insecurity in adults. This was recently confirmed by Afulani et. al., (2018) who determined that there is a great risk of suffering from severe mental illness because of food insecurity. In the same vein, Hamelin et al 2002, Chilton and Booth (2007) point out that food insecurity can lead to loss of dignity, social exclusion and alienation. In explaining this position, it was mentioned that making constant demands from friends and relatives to cater for the dietary needs of individuals may be burdensome, thereby leading to the distortion of social networks. Issues relating to satisfying the dignity and ego needs of lacking international students is also worth considering. For instance, relying on emergency food services which could be a means to reduce food insecurity comes with a negative stigma. This makes it difficult for a significant number of food insecure students to access these services due to the notion that students in the universities are from "well to do" homes (Loopstra and Tarasuk, 2015).

The physical health of an individual is not spared from the negative impacts of food insecurity. Dominick et al, (2018) point out that there is a positive correlation between some acute and chronic illness and food insecurity. Some of the health challenges that may emanate from the negative consequences of food insecurity issues include cardiovascular diseases like hypertension and coronary heart disease among students (Saiz et al, 2016; Laing et. al., 2017; Seligman et. al. 2020). Kirkpatrick and Tarasuk (2007) found that food insecure students are more likely to have frequent hospital visits, especially individuals with illnesses like diabetes, heart disease and hypertension.

This of course is all exacerbated by not having enough money to purchase sufficient, culturally relevant food (Afulani et al., 2018). It is expected that students who lack adequate funds

will be overburdened and struggle with extra work to earn more money, to the detriment of their studies. Hughes et al 2011 reported that in Australia, many international students resort to working long hours at a job, on top of their classroom commitments, so they could afford food for themselves. This, of course, poses a further hindrance to their academic performance. Hughes et al. (2011) also note that students in their study resorted to borrowing money and food from others, and to sharing accommodation even against their will to save money for food. Similarly, Mukigi et al (2018) further revealed that food insecurity makes students take on multiple jobs to supplement their income to save money for food. This in turn affects their studies because they have less time for studying and completing projects at school.

High housing costs in addition to high tuition fees and living-wage incomes makes it difficult for most international students to access food (Benefield, 2019). Mahitab et al (2017) also found that both domestic and international students in the University of Alberta have adopted common coping strategies in dealing with food insecurity. These strategies included stealing, pawning of assets, delaying in payment of bills, and buying stationery and other school supplies. Students reported intentionally delaying payment of their rent and purchasing study materials in order to be able to afford food.

The review of literature on the impact of food insecurity cannot be complete without touching on its impact on academic work. The inability of students to have access to a variety of preferred food items leads to some level of anxiety about what to eat, thereby affecting levels of concentration in class (Farabakhsh, 2017). Dubick and Cady (2016) argue that food insecurity leads to academic disruption like missing class and not being able to afford textbooks. The duo further mentioned that food insecure students missed class, study sessions, or club meetings, and did not perform as well as they wished in their academics. Food insecurity is associated with

negative educational outcomes such as lower math and reading scores as well as poor behaviors such as absenteeism and suspension (Philips ae al, 2018). A study conducted by Patton-Lopez et al (1998) showed that food insecure students are more likely to have lower grade points on average as compared to food secure individuals. This thereby affects student's ability to persist in college and to graduate. According to Cady (2014), food insecurity is a challenge which has the potential to affect the academics, wellness and behavior of students in relation to student's retention and graduation rates. Food insecure students suffer from added stress that affects their academic success and graduation levels (Muligi et at, 2018). In sum, a negative correlation has been established between food insecurity and academic performance (Marota, 2013).

The thorough review of these interrelated bodies of literature highlights a number of dynamics that are important to this thesis. To start with, the contemporary scope of food security is widened to address issues related to availability, accessibility, acceptability, and adequacy of culturally relevant food items for all individuals in our society. Importantly, the lack of access to culturally relevant food among racialized international students may cause them to make choices that affect their emotional well-being, physical health, finances and academic performance. This is particularly concerning given the surge in the neoliberal internationalization of post-secondary institutions. Finally, research demonstrates that issues of food-insecurity-related mental and physical health challenges are significant issues for many students.

The thorough review of previous literature above reveals key insights that establish the foundation for the conduct of this study. I situated my trace of literature to cover the conceptualization of food insecurity, neoliberal privatization of universities and the subsequent increase in fees, which was concurrently met with an increase in demand for international education.

By way of conclusion, I summarize key insights derived from my review of literature directly below.

a) The concept of food insecurity has evolved from a focus on issues of lack of access or hunger to embrace issues pertaining to food quality and availability of sufficient culturally preferred food items that meet the nutritional demand of an individual. In essence, the cultural relevance dimension of food security ought to be acknowledged and appreciated in our society. This is of course particularly relevant within the context of theorizing food insecurity among racialized international students.
b) Canada's adoption of the neoliberal framework contributed to a higher reliance on tuition fees as a primary means to raise revenue for post-secondary institutions. The burden of increased tuition rates is placed disproportionately on international students.
c) Racialized international students have been identified among the vulnerable population that face cash constraints and are at higher risk of facing food insecurity challenges (lack and inaccessibility to preferred food).
d) Students who do not have access to their preferred foods adopt coping strategies such as reducing proportions of food intake, skipping meals among others which in turn affects students' learning outcomes.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter will outline the methodological approach used for the collection and analyses of data for this study. Given the nature of the study, and my particular interest in exploring in a holistic way the dynamics of food insecurity among racialized international students, I relied on a mixed methods approach which offers a vivid description of the experiences of the sample population. The following sections attend to the study area, research design, research approach, sampling technique and data collection, research instrument, and data analysis, respectively.

3.2.1 Case Study Location-Toronto

As the fastest growing city in Ontario and Canada as a whole, most immigrants are attracted to Toronto due to the greater access to education, jobs, and housing. It boasts of multicultural centres, and it is noted as an exceptional cosmopolitan Canadian city that hosts people from all over the world.

Toronto has six universities and one college with University of Toronto ranked as one of the top universities in the world[3]. University of Toronto attracts many qualified students across the globe for post-secondary education. The international student body at University of Toronto constitutes about 21% coming from more than 168 countries and regions. Information obtained

[3] The QS world university rankings served as a reference for this claim. QS Rankings are available at https://www.topuniversities.com/university-rankings-articles/world-university-rankings/top-universities-canada-2021

from the institution's website clearly states that the University of Toronto seeks to build an academic community defined by equity and justice[4].

University of Toronto has three campuses including Scarborough Campus, which was the study area for this research. The Scarborough campus is in a suburban parkland in the residential neighbourhood of Highland Creek. It is bounded by many markets, restaurants, emergency provisioning services and stores that provide the cultural needs of immigrants including all international students of different backgrounds.

3.2.2 Case Study Location-Peterborough

Peterborough, located in Central Ontario within the Kawartha lakes region, is a place known for hosting cultural exhibitions and Indigenous heritage attractions. Trent University is a small liberal art and science-oriented postsecondary institution known for, among other things, small class sizes and excellence in undergraduate education. This research project was focused on Symons Campus, the main campus of Trent University. As of the year 2020/21, about 1070 international students from 80 countries, representing 9.1% of the entire student population, were enrolled at Trent University. Peterborough as a small town has little to no markets or stores that provides the cultural needs of international students from diverse backgrounds.

[4] The statement of institutional purpose stipulates the values and goals that the university seeks to attain. This can be accessed via the following url: https://governingcouncil.utoronto.ca/university-toronto-statement-institutional-purpose

Figure 1.1 Map of Study Area

3.2.3 Rationale for Study Area

The rationale for undertaking the current research study in Toronto and Peterborough is underpinned by the fact that Toronto is the epicenter for Canadian industries which offers great economic opportunities to immigrants including racialized international students. Toronto is one of the highest immigrant destination cities in Canada. According to the 2016 population and housing census, Toronto has a population of 2.7 million people, almost half of which (47% or 1.25 million) are immigrants. The city receives more than 100,000 immigrants annually, including

students, due to its reputation as one of the world's most multicultural cities[5]. The city has a long history of being conducive with easy accessibility of relevant information to guide newcomers. There is also a wide social network of migrants which makes it easy for integration culturally, psychologically, and economically. Given the multicultural and diversified nature of the city, Toronto also serves as a major market for culturally appropriate food to meet the basic dietary needs of all immigrants. Unlike Peterborough, anecdotal evidence highlighted the numerous food support systems available in Toronto to achieve black food sovereignty. Recently, the Toronto city council approved a five-year black food plan to resolve food insecurity in the black community in a culturally sensitive way (Toronto Star, 2021). These initiatives rarely exist in Peterborough as the black immigrant population is relatively lower compared to Toronto. This presents the two cities with unique features and contexts to better understand the dynamics of food insecurity among racialized international students.

Compared to Toronto, Peterborough is relatively small with few immigrants including racialized international students; as of 2016, the share of immigrants in Toronto was 29.1% whereas the share of immigrants in Peterborough was 8.4% (Statistics Canada, 2016). The demographics of immigrants in Toronto is quite diverse with 16.7% from America, 23.6% Europeans, 53.3% Asians and the remaining being immigrants from Africa and Oceania. Peterborough, with an immigrant population of 11,410 in 2016, is a relatively small city in Ontario with a unique cultural system which is relatively less populated with immigrants. The immigrant population in Peterborough is dominated by Europeans comprising 60.6%, and followed by 20.4%

[5] This information can be accessed via the following link: https://www.toronto.ca/wp-content/uploads/2017/12/9282-2016-Census-Backgrounder-Immigration-Ethnicity-Housing-Aboriginal.docx#:~:text=In%20Toronto%20in%202016%2C%201%2C332%2C090,of%20the%20population%20were%20immigrants

Asians, 14.4% people from the Americas and the remaining from Africa and Oceania. Notwithstanding the less culturally diversified nature of the city, Trent University is home for international students. This presents relatively few opportunities for immigrants in terms of accessing culturally appropriate food for racialized international students.

Gaining a better understanding of the dynamics among these two cities with specific reference to experiences of racialized international students is relevant for both research and policy. This will provide key policy recommendations to reshape the policy landscape in terms of providing a conducive environment for racialized international students specifically, and immigrants in general. Comparing Peterborough to Toronto in terms of the experiences of racialized international students and how they access culturally appropriate food provides an opportunity to better understand the extent to which access to culturally appropriate foods and supports shapes and impacts racialized international students' experience. Assessing the experiences of this category of students will yield evidence-based outcomes that will project the voice of racialized international students in the space of literature. In the end, it is anticipated that this study will shape the adoption of workable solutions to the challenges faced by racialized international students.

Through this study, I desire to draw out how the availability and access to culturally relevant food connects to food insecurity in these geographical settings. I provide a representative list of stores and restaurants that specialize in food one might consider culturally appropriate for racialized international students in Appendix H. The sites selected are within 1 to 5 kilometers of the University of Toronto Scarborough Campus and Trent's Symons Campus. The responses of racialized international students from two different geographical settings with varied

characteristics will give us a comprehensive appreciation of the challenge within two different geographical and cultural contexts.

3.3 Research Design

This project employs a mixed method approach that integrates both quantitative and qualitative data collection and analysis in order to generate robust and reliable results. As Creswell, Fetters, and Ivankova (2004) point out, oftentimes either quantitative or qualitative data alone is not sufficient to provide holistic details and trends of a situation. A similar proposal was made by Tashakkori and Teddie (2010) who noted that using both qualitative and quantitative approaches in a study provides a broader and more credible understanding of the research problem than a single qualitative or quantitative approach. Most of the literature that I reviewed focused on food insecurity among the general population with less emphasis on the dimension of availability and access to culturally relevant food among racialized international students. This therefore gives a genuine motivation for me to use the mixed approach to clearly explore the experiences of this minority population and also investigate the structural policies that may be contributing to the challenge. In using the mixed technique, I utilized a survey and semi-structured interviews, thereby exposing me to in-depth data and valuable information that was then analysed through descriptive, correlational, content, and narrative analysis (Adam, 2015). A merit of conducting in-depth analysis of the data through the mixed method approach is that it prevents the researcher from all manner of preconceptions in the research process. This approach enabled me to understand the nuances of food insecurity among racialized international students. Using the mixed approach, structural barriers that may be contributing to food insecurity may be genuinely identified.

Considering the merits of the methodology, I am confident that robust results that reflect the true experiences of racialized international students pertaining to food insecurity have been unearthed.

In terms of survey design, I drew on the Department of Agriculture (USDA) Community Food Security Assessment Toolkit17. In addition, I included a single-item question from the Australian National Nutrition Survey (NNS) which has been widely used to assess food security within the Australian population. The Australian NNS question specifically requires participants to indicate if there were times that they ran out of food and could not afford to buy any more – this has been widely used to assess food security within the Australian population. Combining the single-item question from the Australian NNS to the components of the USDA Community Food Security Assessment Toolkit17 offers me the chance to gather more comprehensive data, as compared to other studies, in that most studies usually rely on a single assessment toolkit. The survey used in this study sought to evaluate the level of prevalence of food insecurity and better understand and identify the problems of food insecurity among vulnerable populations specifically, racialized international students.

I administered the survey online, through the respective international student offices at both Trent University and University of Toronto to all registered international students studying in each school. The online survey was designed with Qualtrics Software and administered between February 2021 to April 2021. The use of Qualtrics software for this study was timely, especially during the Covid-19 period where face-to-face data collection was not feasible given the lockdowns, closure of schools and the adaptation to the studying-from-home modalities. Also, elimination of researcher observation bias was one of the key merits of gathering the data remotely since participants responded to the survey online in the comfort of their private homes.

The online survey was designed to collect information on background variables such as age, gender, level of education, as well as lived experiences on/off campus and responses on food insecurity status and demographics lasting for an average time of 15 minutes. Participants were required to be at least 18 years of age, willing to participate in the study, and able to reflect upon and discuss their experiences of finding culturally appropriate food on and off campus. Participants were also required to agree with the conditions stated in the consent form (Appendix D) of the online survey and interviews (Appendix E). The online survey consisted of experiences of food insecurity, including perceived contributing factors, strategies for managing food shortages, and perceived implications for health and academic success among racialized international students. Additional questions were included to gather specific information on food access regarding the Trent University and University of Toronto racialized international student community. Participants were also asked about the sources from which they receive financial support, government student loans, personal savings, support from family, and full-time or part-time employment during the academic year. Living situations, accommodations and perceived health and academic performances were also recorded. The survey was made up of both open-ended and closed-ended questions.

The interviewees self-selected into the semi-structured interview by responding to an invitation at the end of the survey to further participate in the study. According to Punch (2013), qualitative research allows the researcher to get closer to what is being investigated while gaining an in-depth and holistic understanding of the events to explain intricate social and cultural issues. This qualitative research approach allows the researcher to gain not just an in-depth understanding but also get to know current trends with regards to the subject matter being investigated. A study by Toomela (2011) observes that qualitative research makes it possible to study certain areas that

are not viable with quantitative research while uncovering issues that are often overlooked by researchers. The interview questions were open-ended in nature, providing the respondents with an opportunity to openly respond and express their thoughts clearly.

The interviews were conducted with the aid of an interview guide (see Appendix C). Prior to beginning the interview, participants were sent an informed consent form to sign and confirm their participation in the study. The interviews were conducted online on a one-on-one Zoom video call based on the day preferred by respondents. All interviews were conducted between February to April 2021. Given that the voices of racialized international students are often marginalized and silenced within universities and broader policy venues, the interviews were designed to give these students the time and space to register their voice, perspectives and insights. The questions generally asked interviewees to highlight some of the challenges that they face in assessing culturally appropriate food, and some of the coping mechanisms that they resort to in event that culturally appropriate foods are not available. The final question prompted interviewees to provide solutions, from their perspectives to the issue of racialized international student food insecurity.

3.5 Sampling Technique

In-depth qualitative research is an approach used to provide a deeper understanding of a social phenomenon, within a specific context, and without any attempt to make broad generalization (Patton, 2002). Importantly, sample size is dictated by saturation, not an arbitrarily assigned number. Therefore, sample size in in-depth interviews varies and is relatively smaller compared to the sample sizes of typical quantitative studies since the overarching objective is to provide in-depth understanding of an occurring phenomenon as well as highlighting the dynamics

and variations. Therefore, there are no specific status quos to direct the sample size but rather this is typically influenced by the type of methodology to be used and interaction of datasets in order to achieve saturation.

Also, a growing body of new schools of thought have argued that in order to achieve rigor in methodology and robustness in theory, research must transcend beyond quantitative research to include qualitative research right from the researcher's viewpoint and at the level of the final reader (Bashir, Afzal, & Azeem, 2008; Cypress, 2017; Golfashni, 2011; Joppe, 2000; Maxwell, 1992; Meetoo & Temple, 2003; Morse, Barrett, Mayan, Olson, & Spiers, 2002). Therefore, scholars have justified the need to include reliability and validity in qualitative research to ensure theoretically appropriate and methodologically sound research to inform decisions.

A purposive sampling is often used to select research participants with unique characteristics which is important in fulfilling the research objectives (Silverman, 2013). The research topic targeted racialized international students, so participants were selected based on the purpose of the sample to reveal deep-seated issues that have existed among racialized international student food insecurity.

Recruitment of participants began in February 2021, following approval from the Trent School of the Environment's Ethical Review Process which was done in January 2021. Recruitment continued until April 9, 2021, at which time the targeted sample number of 100 (50 each from Toronto and Peterborough) had been surpassed. For the qualitative study, 8 interviews were conducted out of the total number of respondents (Creswell J.W 1998). As the study specifically focused on racialized international students, participants had to self-confirm that they were a racialized international student in order to proceed with the online survey.

3.6 Data Analysis

Following a triangulation method, data was analyzed simultaneously using both quantitative and qualitative approaches. The quantitative approach used descriptive analysis to understand the demographic dynamics of the sample population and its relation to the objectives of the study. The sample size of 107 was an appropriate number since it helped establish baseline facts about food insecurity experiences among racialized international students.

A comprehensive and extensive literature review of relevant academic and documents was gathered on the topic, drawing together related research by using secondary data from journals, articles, and books. A deep dive into all relevant literature in the field of food insecurity, and synthesis as well as nuances across all the broad themes in Canada were explored. The study used an exhaustive coverage strategy to review the full body of academic literature, focusing on peer reviewed studies that have been published in reputable journals. This was supplemented with a review of relevant literature from non-academic actors, such as development actors working in the area.

Completed online surveys were examined to check completeness, accuracy and consistency of responses in order to detect and eliminate errors. The information obtained through the online survey and interviews were coded, sorted, and grouped to allow further examination. The Statistical Package for Social Sciences (SPSS) was used to process data into statistical tables in order to better interpret the quantitative data. Pearson correlation was conducted to examine whether there was a relationship between racialized international students' difficulty in accessing culturally preferred foods and their academic performance.

3.7 Limitations

Covid-19 pandemic has had an unprecedented impact on many individuals and countries across the globe. The Covid-19 pandemic and the related challenges it posed to students may have played a role in response rate. Many students were already exhausted with virtual classes, and it was difficult to get students to respond to the online surveys. Additionally, emerging research demonstrates that international students in particular faced challenges related to finances, language adaptation and the quest to cope with the challenges of the ongoing Covid-19 pandemic (Sherry et. al., 2009; Wu et. al., 2010; Tsevi, 2019; Redden, 2020).

As schools moved virtually due to Covid-19, it placed a burden on students and made students get away from any other thing which did not concern their personal schoolwork. Most of the students were busy during the data collection period as it represents the end of winter term.

Adapting to virtual meetings for the interviews was difficult as most students were hesitant to participate in the research. Although some questions from the online survey were quite simple, it is possible some students might have misunderstood some questions posed. Additionally, the questions used for food security measures may not have completely measured the most severe range of the students' food insecurity given the focus of this study.

Given the partly qualitative nature of the study that sought to expand understanding of accessibility to culturally appropriate food among racialized international students in Canada, it is imperative to emphasize that the conclusions drawn are more specific to the context of Trent University and the University of Toronto. While this can direct discourse on key issues discussed, it is unlikely that findings from this study can be generalized to explain the different contexts and other broader aspects of food insecurity.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Introduction

Based on analysis of the qualitative and quantitative data, three key themes were identified, including a) The extent to which food insecurity exist among racialized internationalized b) Structural policy elements that contributes to food insecurity among racialized international students, c) Racialization and d) Coping mechanisms or strategies used when food insecure. After reporting on the general demographics of the survey and interview respondents, the remainder of this chapter will elaborate on the core themes.

4.1 Demographic Information of Racialized International Students

Table 4. 1 Socio-demographic data

Variable	Frequency	Percent
Gender		
Male	43	40
Female	54	51
Other	1	1
No response	9	8
Total	107	100
Age		
Between 17-21 years	49	46
Between 22-26 years	34	32
Above 26 years	17	16
No response	7	7
Total	107	100
Status		
Undergraduate level	72	67
Graduate level	24	22
No response	11	10
Total	107	100
Institution		
Trent University	31	29
University of Toronto	67	63

No response	9	8
Total	107	100
Region of Permanent Residence		
Asia	57	53
America	4	4
South America	3	3
Europe	7	7
West Africa	16	15
South Africa	10	9
Middle East	1	1
No response	9	8
Total	107	100

Table 4.1 above summarizes the demographic information of survey respondents. In terms of sex, based on binary sex representation, slightly more respondents (50%) identified as female than male (40%). A very small proportion (1%) of respondents indicated "Other", and 8% failed to respond. The age of the respondents revealed that the majority (46%) of the students were between the age ranges of 17-21 years, and 32% were between the age ranges of 22-26 years. Slightly fewer respondents (16%) were above the age of 26 years while 7% failed to indicate their age range. About two-thirds of respondents (67%) are undergraduates, 22% are graduate students while 10% failed to respond.

Most respondents (63%) are registered at the University of Toronto, while 29% of the respondents are enrolled at Trent University. Finally, the data show a wide diversity in terms of country of origin. The top three regions of origin for most respondents were Asia (53%), West Africa (15%), and South Africa (9%). Fewer respondents identified their home region as Europe (7%), America (4%), South America (3%) and Middle East (1%). About 8% of respondents did not specify their country of origin. It should be noted that an initial screening question in the survey asked respondents if they identified as a racialized international student. If they answered no, the survey would end. Consequently, it assumed that 100% of respondents are racialized.

Given the feasibility approach used instead of representativeness in the research, it is important to highlight that generalizing this study will pose some challenges. However, findings directly point to the exact issues faced by racialized international students which to a higher degree reflects the challenges of the average international student in Canada.

4.3 Food insecurity Experience and Living Conditions

Food in public institutions like postsecondary schools must reflect the cultural diversity of the community. It must also be made accessible for all students on campuses and must be culturally appropriate. Most participants reflected on what food insecurity means to them in the cultural context. Some respondents explained the process of slowly realizing they were, and identifying with, being food insecure. One male undergraduate respondent between the age range of 17-24 from West Africa stated that *"It is a difficult thing to admit to, even though people know it exists. I mean, we are all equals as students, nobody wants to be heard saying they are food insecure. It feels like you are creating a rift between you and the people you are talking with experience. Many people do not even know they're food insecure until they become aware of the impacts in the long run"*. They further explained that they did not realize that they were food insecure until they were on the Internet looking at images that remind them of home; *"I think I have eventually stopped eating culturally appropriate food without knowing. I am not necessarily starving as I stock my fridge with the non-traditional foods I have readily accessible. My menu is constantly the same chain of eating with no changes. It doesn't cross my mind that I am food insecure until I watch pictures of food on Instagram my sister posts, that is when I feel like I am missing something that I can't explain"*.

Food insecurity was described by respondents as the constant worry and unavailability of preferred culturally appropriate food. *"… the agony! I just can't find what I really want to eat. I just get tired of the food I have available. The excitement in finding traditional foods I used to eat back in my home country fills my day with some energy to perform my daily task well"*.

Another respondent noted, *"...In my school, there is literally nowhere to find African foods that suit my cultural preference. Even the few that are present are way too far from my home. I worry about my next meal every other day"*.

This was an experience shared by others: *"…I don't know where to find these cultural foods around where I live except for Toronto. Sometimes I hunt through all small markets and grocery stores just to see if I can eventually find anything of my cultural background. I get myself into a fret over the cost of travelling miles every time to buy foods that I need"*.

Table 4. 2: Emergency food provisioning service in Canada.

Access to emergency food provisioning service	Frequency	Percent
On campus	12	11.0
Off campus	35	33.0
Not at all	52	48.0
No response	8	8.0
Total	107	100.0

Table 4.2 displayed results of whether respondents have accessed emergency food provisioning service at any time during their studies in Canada. About one third (33%) of the respondents indicated "off campus" meaning they accessed emergency food provisioning services off campus; 11% indicated "On campus" meaning they accessed emergency food provisioning

service on campus. A majority (48%) indicated "Not at all", indicating that they had never accessed emergency food provisioning services during their study in Canada. So, in total of 44% of racialized international students accessed emergency food services at some point during their studies in Canada.

These basic numbers don't tell the whole story as it indicates students who do not have access to food and not to other students who don't have access to culturally appropriate food. Henceforth, it is evident that this only represents a partial image and that there are other factors that further frustrate food insecurity for racialized international students. As an example, it is known that food banks do not specialize in culturally relevant food (Abbott et al., 2014; Meldrum, Sciences, Science, & Déterminer, 2006; Micevski et al., 2014)**.** So, emergency food services typically will do little to address the food insecurity experienced by many racialized international students.

Current approaches to addressing food insecurity in institutions all of which are positioned as solutions to ameliorate food insecurity eventually fail to address the deep-seated root causes of food insecurity (Roberts, 2020). Food insecurity among racialized international students might be impeded by the fact that their preferred cultural foods are available but not of appropriate quality. Despite the existing evidence, there is dearth in knowledge about food projects to curb food insecurity issues on campus. Also, those who have little knowledge about it are not willing to utilize it. Other participants claim these canned foods at major food banks are high in preservatives and are not healthy.

"Many students do not care about where the food bank is on campus. It's been tagged with the poor and needy so it's an uncomfortable place everyone neglects. Again, the kind of foods

available at the food bank do not meet my preference and they are high in calories. It is going to be a waste if I take it". This is consistent with other research on why people don't like to use available food banks (Tarasuk et al, 2015; El Zein et al, 2018).

While this is not the main focus of the study, a cursory look at the literature points out that almost half of the food insecure households in Canada are comprised of unattached individuals living with other people or alone (HFI, Province & T, 2014). Unfortunately, most immigrants to Canada constitute another group at heightened risk for food insecurity. Several factors explain the situation. In 2013 the percentage of recent immigrant households who were food insecure was higher (19.7%) versus non-immigrant (12.1%) households (Tarusuk et al, 2015). International students, who are defined as non-immigrants who travel to take classes for their academic goals are mostly found living with others or living and surviving alone. Cady (2014) further explains that underserved groups and vulnerable populations in the university are more vulnerable to food insecurity.

Table 4.3 below presents aggregate responses to the question of whether the student lives on campus or off campus. The majority (83%) of the respondents said they live off campus, 10% said they live on campus, while 7% of the students failed to respond.

Table 4. 3 Living on or off Campus

Do you live on campus or off campus?	Frequency	Percent
On campus	11	10
Off campus	89	83
No response	7	7
Total	107	100.0

Conversations around food insecurity especially among international students are often avoided because of the stigma and the shame attached to being food insecure. Many respondents noted how difficult it is to live off campus and/or away from home. Sometimes, when international students face uncertainty and vulnerability when it comes to food issues, they barely want to talk about it. Some students spoke about their deep desire to be included in discussions around food (in)security but are reluctant to because they feel it might affect their dignity and how they are perceived by others. Racialized international students are already faced with the challenge of "fitting in", and many feel that articulating their experiences of food insecurity will result in further marginalization. This perspective was expressed by a number of respondents:

"Nobody really wants to talk about why and how they haven't eaten to a friend or anyone on campus. Imagine talking to a colleague of how hungry you are or how you can't find foods preferred. Come on, there are more things like assignments to worry and discuss about. I am shy to talk about it, in fact my ego won't allow me…"

"Living off campus leaves me with few friends on campus. I barely speak to colleagues as they are all whites, I feel like they would not better understand my situation as I am black. I don't think I am even comfortable enough to talk about my experiences of being food insecure to my friends. I might come out as poor, which is far from that".

Table 4. 4 Eating culturally preferred meals

How often do you eat culturally preferred meals?	Frequency	Percent
Never	6	6.0
A little of the time	15	14.0
Sometimes	35	33.0
Most of the time	30	28.0
Always	9	8.0
No response	12	11.0

Total	107	100.0

Table 4.8 summarizes response from the question about how often students eat culturally preferred meals. A third of respondents (33%) indicated “Sometimes”, just over a quarter (28%) indicated “Most of the time”, 14% indicated “A little of the time”, 8% indicated “Always”, and 6% indicated “Never”.

The third coping mechanism by students is adapting to the local foods. There is not much alternative for racialized international students when it comes to cultural foods. They gradually learn to adjust their “taste buds” to suit the local food made available.

“Mac and Cheese, fries and Lasagna has become a routine during school days which has not been my thing since childhood. I am now getting used to eating all these 'white foods' since that’s what is available. I am someone who finds it hard to try new things, so I just stick to what I have or what is available.”.

“I also buy a slice of pizza with a bottle of drink when I get extremely hungry during the day..."

“… eat what is available regardless of what it is...When the desirable is not available, the available becomes desirable. Among the common is rice and pasta; and that’s what I eat everyday...It is really frustrating, but I have taught myself to get used to it ".

Further to this some students also adapt to eating local fruits which they are used to and relatively easy to do. One student expressed in this statement that; *“I have totally adapted to eating local fruits. Fruits are almost everywhere in the grocery stores around me. I now enjoy eating*

apples, avocado and oranges since I can get them anywhere, everywhere. Fruit is all I eat, and I can't get tired of it, I am so used to it now.

Figure 4. 1: Sources of financial support

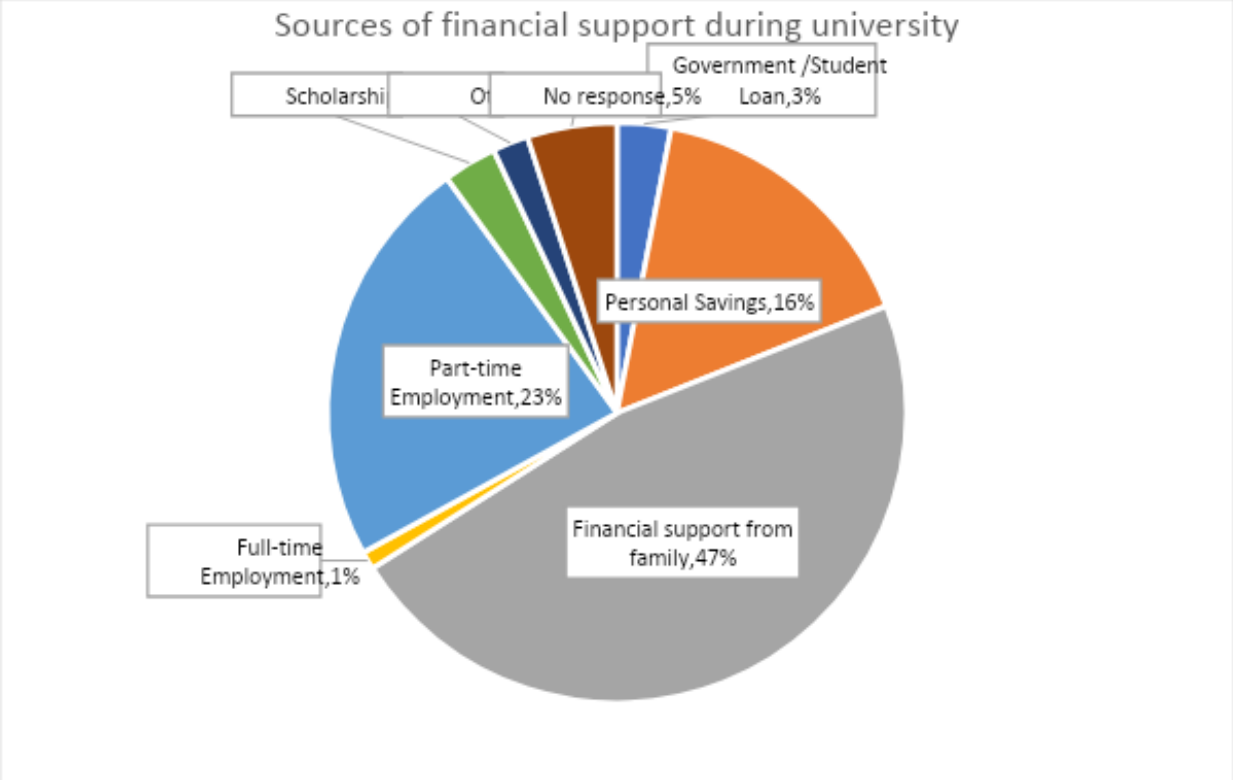

Table 4. 5 Financial supports during school

Financial Support	Percent
Government /Student Loan	3
Personal Savings	16
Financial support from family	47
Full-time Employment	1
Part-time Employment	23
Scholarships	3
Others	2
No response	5

Figure 4 displayed the sources of financial support racialized students receive during their course of study in the university. A majority, (47%) indicated they received financial support from their family; 23% indicated they received financial support by engaging in part-time employment; 16% indicated personal savings as their source of financial support.; 3% claimed they received financial support through scholarship and Government/Student loan; 2% indicated "Others" as their source of financial support while 1% indicated they financed themselves through full-time employment.

Most racialized international students solely depend on family support back home for survival on campus. This makes them particularly vulnerable to unforeseen contingencies such as Covid-19 which resulted in a halt to banks, loss of jobs and interrupted freight shipments all over the world. International students who depend on family support were overwhelmed in this situation and it frustrated their food security.

The results obtained from the data clearly prove that racialized international students. Perhaps most important among these are the structural barriers preventing international students from earning income. For example, international students are not eligible for most grants and scholarships, full time employment, or loans while in Canada. Not surprisingly, as Banjong Delphine (2015, p.g.133) observes, "international students generally face more problems than domestic students financially". Even though international students face the brunt of higher tuition rates than domestic students, their domestic counterparts are offered more financial support during their stay in school. Instead of concentrating in school to achieve their academic goals, they begin to chase money to achieve academic goals because the casual jobs are time demanding and tuition is high. Despite working more hours which is against the law in Canada, international students try

to meet demands from higher tuition and expense which in the end they lose focus in school. It is clear that such a vulnerable population should be provided with all the support they need on campuses to achieve success.

Table 4. 6: Meal plan from School

Are you currently on a meal plan from School?	Frequency	Percent
Yes	20	19
No	70	65
No response	17	16
Total	107	100

Table 4.5 presents a response to a question on whether respondents are currently on a meal plan at their respective universities. A majority (65%) indicated they do not receive any meal plan from their university, while 19% said that they are on meal plans from their various universities. Given that the majority (83%) of respondents live off campus, there is a higher likelihood that most respondents do not have access to meal plans.

Theme 1; structural policy element and food insecurity among racialized international students

As discussed in chapter 3, The impacts of neoliberalism on university campuses have included cost cutting, commercialization, and dramatic increases in tuition rates for international students. At the moment, international students already pay 3 to 4 times the cost of their domestic counterparts (Lucius & Barber, 2009). By cutting costs, institutions increase class size and actively recruit as many international students as possible as a strategy to fill budgetary shortfalls and bolster institutional coffers. Universities are increasingly market-oriented and are more interested

in the benefits from increased tuition rates as they find ways to make up the funding gap resulting from decades of state divestment from postsecondary education. Racialized international students' responses in this study illustrate how these policies may create harmful challenges to students who need additional resources to achieve their academic goal.

In this section, I will explore how the neoliberal system contorts postsecondary education to further contribute to food insecurity among racialized international students. Key among these elements is the impacts of neoliberalism on campuses at University of Toronto and Trent University resulting in high cost of tuition fees for international students. In effect, participants acknowledge that most universities in Canada are grounded in neoliberal policies as their roles are changing. Respondents claimed the tuition fees international students pay are exorbitant and that as a result buying preferred food becomes a problem. This observation is supported by views from students who pointed out that tuition rates in Canada keep rising every year which further places a burden on racialized international students: *"Tuition fees are excessively high among international students in Canada and keep rising every other year. Sometimes you are forced to choose between eating expensive cultural foods or going to school. I am here in Canada for school so I'll rather pay my tuition fees and eat just anything that will fill me up"*.

Another student observed, *"Food prices are very high in Ontario…you are unable to buy the expensive culturally appropriate foods that you may find. Our fees are so high we barely are left with enough money to afford foods we prefer."*

Respondents were also of the view that another challenge of accessing culturally appropriate foods in school is cost. This is because only a few culturally preferred foods are available, which makes them expensive. Already, international students believe the high cost of

tuition coupled with the high cost of culturally appropriate foods makes life difficult on campus. Coupled with high rent and tuition fees, culturally appropriate food is simply out of reach of most racialized international students. This finding is consistent with a study by Benefield, (2019) who argued high housing costs in addition to high tuition fees and non-living-wage incomes makes it difficult for most international students to access food.

Theme 1.1 Being food insecure as a Racialized International student.

This section summarizes the challenges racialized international students encounter due to food insecurity. From the analysis of this study, it is well noted that hunger among racialized international students is not always about the lack of food, but it is about the preference of traditional foods of diverse student backgrounds. This expression made by a participant during the interviews claims that students are sometimes hungry because they cannot find food of their preference.

"*I have a huge fridge in my room stocked with food, but I still get hungry most of the day. I am just tired of eating the same kind of food every day. I just need to eat "amala and "eforiro". My grandmother prepares it best*".

A clear highlight of the experiences of one racialized international student points out that: *"There have been times where I can't sleep because I miss late night traditional snacks my mum makes for the whole family to eat together on a table before we go to our separate rooms to sleep. Oh! "Bota". Despite it being a meal for breakfast in most individual homes, we get to eat it as*

snacks every Friday night with the family. So yes, Friday nights are more like a memorable day for me."

Respondents note that lack of access to culturally appropriate foods result in difficulty in learning. The inability for students to access culturally appropriate foods distracts their focus on studies.

"This really affects my studies in school making me very dull sometimes in class discussions"

Further to this, students complain of going hungry because they are unable to get their food of preference on campus which may also result in learning difficulties. An interviewee expressed it this way; *"I basically went hungry for days because I didn't find anything suitable enough for me"*.

A related response from an interviewee was about how the lack of cooking skills and time could affect food security among racialized international students. *"… I eat nothing during exam period because I do not know nor have the time to cook traditional foods. I am highly food insecure during exam periods*."

Case Study 1: Food insecurity, Race and Culture: A Case Study of a Racialized International Student in Trent University

It is interesting to note how your research questions mimic the daily plight of the average racialized international student. In fact, all the issues tackled are my daily experiences, which I do not think differ from the rest of other racialized international students, like how food insecurity impacts culture, the type of food, among other pertinent issues.

Access to Culturally Appropriate Food

I can emphatically mention that on campus, culturally appropriate food is nonexistent. You don't find those things. While they exist off campus, there are limited options for one to select from without many varieties, but it is what it is, Peterborough for you! Truth be told, it is actually difficult if not impossible to find culturally appropriate food. The smaller the community, the relatively smaller the immigrant community including racialized international students and thus, the less likelihood of finding culturally appropriate food. A typical example is a small community like Peterborough which has a relatively smaller number of immigrants compared to Toronto. I travel to Toronto a lot, that's where I go to get most of my needs including culturally appropriate food.

How I cope without Culturally Appropriate Food

There is no doubt that 'there is no place like home'. Sometimes imagining that I am 1000s of kilometres away from home creates a discomforting mood. Not closer to family is one stress on its own. Not having what you desire to eat deepens the void which is inevitable in nature. The thought of even seeing the number of days it takes to ship my home food is not something I even appreciate as it makes a lot of difference having the same food from home is not the same as the transported ones. While this might be troubling, I do not want to torture myself about it because my conscience tells me it is not even fair to eat something that will travel far away. So, what I do is to adapt to some local food around me. When it comes to fruits, I prefer local varieties, but when it comes to other food like potatoes, I treat them like I would treat plantain or any other seasonings for food, and that's the difference. I do local recipes and then add my own seasoning to it, so that's how it works.

I am not picky; I like to explore diverse foods. During the pre- Covid-19 period, we had more of these gathering potlucks. I love potluck so that is the way I cope and if I cannot find my own culturally appropriate food, I try different things. Since I started my master's program and I moved away, it's difficult to find gatherings like that, especially during Covid-19 pandemic.

I don't do restaurants, but I feel once I get to school, it gets more personal as I get to meet people. You know in the background, it is different when a waiter comes to tell you that, 'this is our menu' which has no single culturally appropriate food in it. I think it's more personal when a student is narrating about their own parents with a typical memorable experience about how their grandma used to make their favorite recipe but again, they warn you about the differences in taste.

My Plight as a Racialized International Student

During my undergraduate studies, I only met 2 African guys that I know of. Most of my friends are indigenous so we were always around culture. I sometimes felt isolated in a way. I hear a lot about the indigenous food system but not racialized international students. My indigenous friends would tell me how they wouldn't find their culturally appropriate foods. I feel so sad whenever I think about that.

I wish the community markets would push for more diverse food, but if they don't have enough students, I do not want my cultural food to go to waste, you know. Especially in downtown Peterborough and in those markets, sometimes you see the poor little Plantain fading away because many people lack access. Nobody is even buying it and I feel horrible when I see food going to waste. If there is the need for these cultural foods everywhere, then we need to consider the number of people who will access it.

Trying to connect racialized international students with this type of food or the already existing specialty stores downtown could add to institutions' inventory. I do not think it would be very productive to have it everywhere. Think about it, these students are only there for eight months or a couple of years depending on the program. Therefore, it is not favorable for the stores to make it available all year long if those students are only there for a specific time which is sad.

Available food, disconnected culture, and my reaction

Sometimes it is not all about the income factor. Oh yes! I had a roommate who is like a sister to me now. We lived together for two years, and her parents would come every weekend to stock her fridge. She does not cook, she could not do much, but they fill her fridge with chicken nuggets, frozen fries among other food stuff with high sugar content. You could feel her emotions when she opened her fridge and shut it aggressively because she was tired of them as she couldn't eat what she really preferred. Sometimes you are missing and at that moment, your soul needs to fully connect to your culture. I don't know how to explain this, but just the smell of your cultural food is healing, it even reminds you of your memorable good old days which are vital to life.

I love my Haitian dishes. A very good Jamaican avocado, even if it's ten bucks, I am buying it, because it is so good and it gives me a good feeling, but I do not buy it on a regular basis. Truth is, we cannot expect all these to follow us wherever we go, or we are, because it is very destructive for the environment, the shipping and all that. But whatever I cook, I have my specific spices I love to use. There are some spice mixes that I do by adding two different spices together to get something like what I can get from a pure natural spice back home. I eat fried rice sometimes - something that is a different culture, but it has those spices in it, just to have that Haitian touch.

I do believe people deserve their culturally appropriate food. More importantly, indigenous people should have what they want. Whenever I go to the Caribbean, I get all the food I deserve.

The university can support racialized international students in so many ways. For instance, Trent University gives grocery store cards to help students that are food insecure. You can apply for it, and they give you a gift card to go grocery shopping anywhere. That was one of the initiatives I wanted to see if students access those services on campus, however, it appears the majority have no knowledge about it.

The Kensington market has a huge international market where I go to get cultural foods. Also, the international student office can help create awareness. I even help people share information about where to access culturally appropriate food.

Case Study 2: Social Network and Coping Strategy: A Case of a Racialized International Student in the University of Toronto

My view about Toronto

I love to tell a story about my orientation, upbringing, culture and sharing of personal experiences of places I visited as well as the recorded memories where there is intersection of truth and reality. I am glad I have a voice in your interesting research that examines a pertinent issue among international students. I must say, living in Toronto for school is the best choice I ever made. I have lived here for the past 3years, and I hope to stay here after my undergraduate studies. Toronto being a diverse community, I have made a lot of friends with known and diverse cultural backgrounds given the vast multicultural environment it creates with its numerous immigrant communities of which I am one.

The Diaspora and Social network as Cultural Shock Absorbers

I would describe myself as fortunate to have some Chinese friends in my class. Before classes began in the first year of my studies during orientation, the first thing they asked me was, "have you heard about the restaurant nearby that has Tom Yum Soup? It's so good, we can get lunch later". Trust me there is no better feeling than being approached with such a kind gesture on your first few days at school. Our lunch dates turned into a routine which made us agree to have "friends meet up" once in a month. It made me understand the importance of social networks and its role as cultural shock absorber especially in a foreign land without the immediate family.

I volunteer for a local food organization in Ajax, Ontario. After every other month, I receive food boxes from them which again helps to provide the ingredients for cooking food during our "friends meet up". They help a lot. In University of Toronto, the food banks are there to help curb issues of food insecurity, but most students are food insecure. Trust me, most of the free food there just goes to waste due to the stigma it comes with, and most people do not like the types of food shared.

My experience with the food system in Toronto

Concerning challenges in locating culturally appropriate food, I do not have difficulty in accessing my non-traditional foods. Given the multicultural nature of Toronto with its vast majority of immigrants from almost all parts of the world, there are several markets and stores that sell culturally appropriate foodstuff of various varieties around my neighbourhood. The existing market in Toronto basically meets the needs of immigrants, however, there is an income constraint. This is mainly due to the relatively higher prices of culturally appropriate food because of high

shipping cost, the small market size and increasing demand. While I crave for such food, I am financially handicapped to afford anything of my choice.

Given this constraint, the strategy I adopted for the past few years was a bulk purchasing approach to save money while I also have enough stock. In fact, there are times where I eat twice or once a day just so I can have enough culturally appropriate food all week. Sometimes I plan with my friends to meet up to cook culturally appropriate recipes as a way of bonding while spending some time together. I must say that through this experience, I have come to appreciate the role of social networks and their importance of leveraging my plight as a student in Toronto in the past three years. It feels so refreshing and homely anytime I have the opportunity to join my friends, share knowledge, enjoy our meals, and listen to good music from our home countries. We do this every other month; and we collectively believe it is a way of curing stress and homesickness.

The role of Income: A paradox of available but no accessible culturally appropriate food

Tuition fees are high in Canada, coupled with exorbitant property rent, especially in Ontario, therefore, students especially racialized international students are with meagre income to buy the culturally appropriate food they prefer after settling tuition and accommodation fees. I think the income factor plays a significant role in deciding to purchase culturally appropriate food or otherwise. Consequently, most of my friends prefer to eat fast foods that are cheap regardless of their nutritional values since they cannot afford to buy the expensive culturally appropriate food. Again, the time involved to cook the food also affects the decision to eat culturally appropriate food. Given my high credit hours, assignments and other commitments as a student, there is little time remaining to prepare my preferred food.

Table 4.6 below displays the lived challenges of being a food insecure racialized international student. With a mean 3, respondents indicated they were sometimes hungry but had food that did not suit their preference. Respondents also noted there were times when they were not eating enough because there was no money to buy enough food (an average response of 2). In addition, with a mean of 3 students claimed they sometimes have difficulty concentrating in class due to lack of food.

Table 4. 7 Lived Challenges

Lived Challenges	Never (1)	A little of the time (2)	Sometimes (3)	Most of the time (4)	Always (5)	No response (6)	Mean
Have you ever been hungry but had food that did not suit your preference?	17%	23%	24%	21%	5%	9%	3
Were there times when you were not eating enough because there was no money to buy enough food?	33%	20%	21%	16%	3%	7%	2
To what extent has food access affected your ability to concentrate /focus in class. (Calculated based on performance in class)	24%	22%	24%	17%	3%	10%	3

Theme 2 Racialization

Universities across the world recruit many international students for a variety of reasons. The excitement in receiving an admission letter from foreign schools for educational purposes is a goal almost every international student wants to achieve. Apart from the urgent need for

academic excellence abroad, international students are also interested in gaining international "experience". The rich cultural diversities in classroom discussion can be attributed to the presence of international students on university or college campuses. Though Canadian universities have attracted interest and attention, little has been paid to the needs and experiences of racialized international students. Racialized international students seem to bear the brunt of the internationalization of postsecondary education. It is important that we rethink how diversity and multiculturalism are being practiced in many university spaces because it can reinforce inequities. Food preferences among cohorts of international students are shaped by many factors including cultural and religious beliefs which may all play a vital role in the processes of self-identity and self-discovery (Bisogni et al, 2002). Diversifying food options must be treated as priority if universities take seriously their responsibility to racialized international students.

The findings from the study reveal that food insecurity poses many challenges for racialized international students. Students claim they were sometimes hungry though they had food that did not suit their preference. Students also claimed there were times when they were not eating enough because they did not have sufficient money to buy enough food. In addition, the racialized international students argued they sometimes had difficulty in accessing food which subsequently affected their ability to concentrate /focus in class. These findings are in line with some literature on food insecurity on college campuses and challenges students are likely to face (Lin et al., 2013; Bruening, Brennhofer, van Woerden, Todd, & Laska, 2016; Gaines, Robb, Knol, & Sickler, 2014; Knol, Robb, McKinley & Wood, 2017; Benefield, 2019).

When asked "What were some of the challenges to locating culturally appropriate food while in school?" respondents identified some key challenges they encountered locating culturally

appropriate food while in school. Students found access to their traditional foods as a problem. Others also mentioned that foods in their home countries tasted better than Canada and that their cultural identity was mainly connected to food. Some excerpts from respondents that point to the inaccessibility of culturally appropriate foods on campus include: *"My cultural foods represent who I am and where I come from. In my School, there is literally nowhere to find African foods or foods that suit my preference. Even the few that are present are way too far from my home. I feel lost in my soul most of the time."*

Another respondent asserted: *"I must say leaving your country and culture is an overwhelming experience. My early period of stay in Canada was not easy. My friends who are also international students complain about the feeling of isolation and the inadequate access to finding their culturally preferred foods"*

A third respondent indicated that accessibility of culturally appropriate food could be geographic specific in this response. *"I also do not know where to find these cultural foods around where I live except from Toronto"* This means that international students studying in big cities may have fewer challenges accessing culturally appropriate foods which put it in a more geographically bound context in terms of accessibility.

A challenge to locating culturally appropriate foods indicated by an interviewee is the high prices of culturally appropriate foods. Respondents are of the view that few of these foods are available which makes them expensive. Already international students believe the high cost of tuition coupled with the high cost of culturally appropriate foods makes life difficult on campus.

"*The prices of food in Peterborough are very high. Accommodation together with expenses are high coupled with high tuition rates, obviously I would not have enough money to purchase expensive traditional food of my choice"*.

Theme 2.1 Health Challenges

Racialized international students also face health associated risk challenges due to their inability to get the appropriate choice of food, hence resorting to the available ones leading to food insecurity and a deficiency in nutrients. This study reveals that students face difficulty in learning due to food insecurity. This is consistent with a study by Pryor, Lioret, Van Der Waerden, Fombonne, Falissard, and Melchior (2016), noting that emotional distress and depression are associated with food insecurity. The negative health impacts of food insecurity, including poor physical and mental health are well documented, and reflective of the findings of this study (Afulani, Coleman-Jensen, & Herman, 2018; Alvarez, Lantz, Sharac, & Shin, 2015; Berkowitz et al., 2013; Bishop & Wang, 2018; Brucker, 2016; Bruening, Dinour, Rosales Chavez, 2017; Bruening, van Woerden, Todd, & Laska, 2018; Crews et al., 2014; Darling, Fahrenkamp, Wilson, D'Auria, & Sato, 2017; Dominick, Olnyk, Widmar, Ruple, Grennell Weir, & Acharya, 2018; Gregory & Coleman-Jensen, 2017; Gowda, Hadley, & Aiello, 2012).

Respondents self-reported health and well suffered as a result of their inability to access culturally relevant food. This was clearly captured during interviews with two respondents. The first noted of a potentially unhealthy weight gain while in Canada:

"I only eat pizza, burgers and fries on campus. My friends and family back home during video conversations over the phone complain of how much I changed so much in size and weight. That's tough! My health, the needed attention and concentration in class has all been affected".

The second described developing a measurable deficiency in a key mineral required for good health.

"Not finding food that tastes like home makes me really sick, but it looks like I have no option. As I speak to you, doctor reports my body lacks iron."

Theme 3; coping mechanisms or strategies used when food insecure

Table 4. 8: Ability to explore diverse foods

Ability to explore diverse foods	Frequency	Percent
Yes	76	71
No	23	21
No response	8	8
Total	107	100

Table 4.7 displays the results of a question about whether respondents have the ability to explore diverse foods apart from their culturally preferred foods. A majority (71%) of respondents indicated that they like to explore diverse foods apart from their culturally preferred foods, while 21% of students indicated that they do not like to explore diverse foods apart from their culturally preferred foods. This suggests that racialized international students are, overall, willing to be flexible and adaptive with their diets – and yet, their food insecurity persists. Some key adaptation strategies emerged from the responses provided by interviewees.

The first coping mechanism is “finding proximate foods” in and around campus. Students explored other options that approximated their own culturally appropriate food. Others noted attempting several recipes with adapted ingredients that would taste familiar to them.

“Again, not to lose my cultural identity, I make sure to add a dish of Haitian in everything I eat” and *“I began to explore different kinds of foods. I tried all kinds of foods I had never heard of or ate all my life. It was hard from the start, but I just got used to it. In Fact, I just ate anything I found.”*

The second coping strategy identified by respondents is “Support from friends and colleagues”. The social networks developed by students aided them to access their food of preference and mobilize resources to buy culturally appropriate foods.

As shown in the quotations below, many racialized international students who were interviewed support the claim that it is necessary to form a network among friends and colleagues to help combat food insecurity on university campuses.

“I was also fortunate to find friends and colleagues that came together to form a group for "rideshares". I could ask them for a ride for less to go to Toronto to buy cultural foods i preferred.”

“I visit my Filipino friends every other weekend to enjoy their meals. I just like to always try something new. I also attend Potlucks to get some freebies and to meet new friends."

“I like to pay visits to friends from my background who are fortunate to live with their parents in Canada. They treat me like family. I get to have their traditional home cooked meals like “Batchoy and Lechon” and also feel at home”

Theme 3.1 Culturally Appropriate Conviviality

In building a welcoming space for international students as a whole, institutions must include a place for conviviality. Bringing a diverse number of people together and the variety of experiences they share can help solve some of the challenges racialized international students face. On the other hand, conviviality shouldn't be only seen as a form of sharing food only but a way of socializing, creating self-awareness and togetherness. When people of the same or similar group come together to share meals, it establishes a sense of community that will further help suppress the problem of food insecurity and other challenges racialized international students face.

Students found Family support as another coping mechanism to adapt to culturally inappropriate foods. Some students who have family relations within Canada, sometimes visit to eat meals and carry some along for storage for subsequent periods.

Most participants stated this requirement in the following words: *"I have found some wonderful families that invite me over sometimes to come over to their homes for a well-cooked traditional meal like fufu. They are extremely nice people. I always go back home with packaged leftover food after my visit and make sure to eat wisely until my next visit. I eat in small portions, so I don't go hungry."*

"As a new member in the church I fellowship with in Canada, I have met so many friends and family who gifts me with food items and gift cards because I play the piano in Church. I get to have dinner on around table with my youth leader and family to have delicious cultural foods like "attieke" and palm butter"

It is rather interesting to have a respondent indicate that a strategy to cope with the difficulty of adapting to culturally inappropriate foods is to buy food in bulk during limited travels.

In the view of the interviewee, *"I travel once in a month to get the cultural foods I prefer. Here then I spend more than I can to get everything in bulk and bring it back home."*

Table 4. 9: Where to buy Culturally preferred foods.

Where do you get to buy culturally preferred foods?	Frequency	Percent
Grocery stores near me	39	36.0
Travel far away to buy food	27	25.0
I don't know where to access them	15	14.0
Others	19	18.0
System	7	7.0
Total	107	100.0

Table 4.9 displayed results of where students get to buy their culturally preferred foods, it appears a majority (36%) of the respondents indicated they get their culturally preferred foods from the grocery stores near them, (25%) of the students claimed they travel far away to buy food, (14%) of the respondents claimed they do not know where to access their culturally preferred foods, (18%) of the students indicated "Others". However, (7%) of the students failed to respond.

Table 4. 10: Other Avenue students buy culturally preferred foods

Where do you get to buy culturally preferred foods? - Others	Frequency	Percent
External meal plan/restaurants	18	17.0
Food panda and cooking	15	14.0
Mails from my home country, or uber eats	9	8.0
My parents send them over to me.	15	14.0
Try to cook by myself	18	17.0
Uber	21	20.0
No response	11	10.0
Total	107	100.0

From Table 4.10 above racialized international students were questioned on other avenue students get to buy culturally preferred foods, majority (20%) indicated that they get their culturally preferred foods through Uber, (17%) indicated they get their culturally preferred foods from "External meal plan/ restaurants" and "try to cook by myself" respectively. (14%) indicated they receive their culturally preferred foods from "Food panda and cooking" and "My parents send them over to me" respectively. (8%) indicated they get their culturally preferred foods from "Mails from my home country, or uber eats". However, (11%) of the students failed to respond.

Table 4. 11: Times when you could not afford to eat culturally preferred foods.

Were there times when you could not afford to eat culturally preferred foods?	Frequency	Percent
Never	25	23
A little of the time	25	23
Sometimes	32	30
Most of the time	18	17
No response	7	7
Total	107	100

Table 4.11 displayed results of times when students could not afford to eat culturally preferred foods, it appears majority (30%) of the respondents indicated "Sometimes" meaning they sometimes times could not afford to eat culturally preferred foods, (23%) of the students indicated "A little of the time" and "Never" respectively, (17%) of the respondents indicated "Most of the time" meaning they most of the times they could not afford to eat culturally preferred foods.

4.4 Relationship between academic performance and food insecurity

DISCLAIMER: This study was not primarily focused on the relationship between the academic performance and food insecurity among racialized international students, nor was it designed to investigate this dynamic specifically. Consequently, I do not have the data to make firm conclusions about this. Perhaps, by talking about the coping strategies racialized international students must deal with food insecurity. While there may not be a strong relationship between academic performance in my study, it could be the case that racialized international students' coping skills help to affect the impacts it creates.

The study sought to find out the relationship between food insecurity among racialized international students and their academic performance. This finding is contrary to study in the United States by Raskind, Haardorfer, & Berg (2019), who discovered that approximately 29% of students experienced food insecurity during the previous 12 months, and food insecurity was associated with poorer psychosocial health and academic performance. The study further revealed there was no difference in academic performance of the students due to difficulty in accessing culturally preferred food between the male and female students.

In Table 4.3a (see Appendix G), a Pearson correlation was conducted to examine whether there is a relationship between racialized international students' difficulty in accessing culturally preferred foods and their academic performance. From the results, the association between "to what extent have food access affected your ability to concentrate /focus in class" and "do you think food access affect your grades", the results revealed a positive but insignificant relationship ($r=.119$, $N=107$, $p=0.38 > \alpha=.05$). This appears there was weak correlation between the two

variables and implies that small increases in the levels of difficulty in accessing culturally preferred food does not necessarily affect the performance of students.

Table 4. 12: Ability to keep up with schoolwork.

Thinking about your ability to keep up with your schoolwork. Would you say it is?	Frequency	Percent
Excellent	16	15
Very Good	21	20
Good	34	32
Fair	21	20
Poor	10	9
No response	5	5
	107	100.0

In Table 4.3e above, when students were asked about their thoughts regarding their ability to keep up with their schoolwork, the majority (32%) claimed their ability to keep up with their schoolwork was good. (20%) of the students claimed their ability to keep up with their schoolwork was very good, (15%) of the students claimed their ability to keep up with their schoolwork was very good. However, (10%) of the students claimed their ability to keep up with their schoolwork was poor while (5%) failed to respond to the question.

The response from table 4.3e above goes to confirm the findings from the Pearson correlation and the independent sample t-test that difficulty of racialized international students in accessing culturally preferred food does not necessarily affect the academic performance.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

While the discourse on food insecurity has gained ground in the academic and policy space, the issue of food insecurity among racialized international students has not gained much prominence within the academic landscape. There are very few studies focusing on food insecurity among racialized international students, and virtually none that give voice to those students, as I have attempted to do here.

Following a mix method approach, drawing data from students enrolled at Trent University and University of Toronto, the study found that racialized international students have a higher likelihood of being food insecure. Furthermore, my work demonstrates that not having access to one's culturally preferred foods is a key element of food insecurity. The study found that a major structural policy element that contributed to food insecurity among racialized international students at University of Toronto and Trent University was the high cost of international student tuition fees. With the high levels of fees charged to racialized international students for post-secondary education, low-income non-traditional students have virtually no chance of enrolling. It is found that most racialized international students had limited access to sufficient cultural foods due to the high cost of tuition, living expenses, and food. Notably, most culturally appropriate foods are imported from the respective home countries of international students. The long duration of shipments including high shipment cost tends to exert upward pressure of culturally appropriate food. Additionally, there is the lack of variety in the existing culturally preferred foods accessible to most students.

However, some solutions to food insecurity among racialized international students identified were the provision of better social functioning, stocking grocery stores/creating markets in and around campus with culturally appropriate food for all international students. Also, the role of social networks and the diaspora served as cultural shock absorbers. It will be appropriate to provide an enabling environment for easy access to culturally appropriate food. This can be partly achieved through subsidizing the transportation of food that meet the needs of students in order to maintain an affordable price equivalent to how they are priced in home countries. Also, access to food coupons from school administration may go a long way to leverage the plights of students with relatively lower income to be able to purchase culturally appropriate food.

There was evidence that points to a direct relationship between culturally preferred foods and academic performance. This relationship underpins the fact that there is the likelihood that racialized international students who have access to culturally preferred foods are more likely to perform well academically. In conclusion, racialized international students have the potential to suffer from poor health and academic performance and other vulnerabilities due to food insecurity, it is vitally important to treat food insecurity among the international students' community as a priority.

5.2 Recommendations

5.2.1 Role of Host Institutions

Institutions including their respective international students' offices must collectively help international students adjust to new academic settings and achieve their academic goal and international experience. Racialized international students lack the needed support and resources to excel on university campuses. Increasing financial aid among racialized international students

can help solve food security issues among this population on campus. Even though most institutions offer a variety of awards, loans and bursaries, most international students do not always qualify for these loans and awards due to the eligibility requirements for application. School support is very important. Institutions know the percentages and categories of international students present in schools. They can help create avenues that can be welcoming to all racialized international students. It is deemed important that institutions and other departments on campus who work in tandem with the international student's office help to provide immediate needed services for all racialized international students. It is the role of international student offices to create programs that align with the cultural interests of all international students. There should be a system that is interdependent for all international students.

Following the claims of racialized international students in this study as postsecondary institutions heavily rely on international students' dollars on tuition, they should also take into consideration the experiences or challenges racialized international students face on campuses.

International student's offices must create a strong connection and a variety of special measures among racialized international students which will further chart a path for incoming or new international students to help curb issues of food insecurity on campuses. Organizing activities such as cooking clubs, participatory inter-cultural culinary activities will also offer international students a welcoming and amazing international education experience in Canada. Also, offering occasional free shopping gifts cards and drive shares can help international student food security

To feel a sense of belongingness and appreciation of different cultures, racialized international students must come together to form groups on campus to share knowledge and food through cooking. In this study most racialized international students complained of not knowing

how to cook their preferred cultural meals. The role of social networks will help identify individuals of the same group together. As recommended by Rojas et al. (2017), putting diversity at the center of the transformative agenda of post-secondary campuses is a necessity. Interventions such as cooking together will be an avenue to promote diversity among students. Besides, it will also help students to learn cooking skills from their colleagues and also help curb the issue of isolation among racialized international students as it brings individuals of the same culture together. This will help congregate to help share ideas on food and also create relationships through food. Again, the "open shopping gift cards" that can be accepted in almost every marketplace or store is another measure to help racialized international students purchase food of their preference.

5.2.2 Creating markets in and around campus with culturally appropriate food.

Universities should liaise with international communities to stock grocery shops, create markets and eateries that respond to the cultural food/meals of all racialized international students. As most grocery stores and markets in Canada do not have adequate cultural foods that racialized international students seek or need, it is important that universities create avenues that will help solve this issue.

Canada has a diverse population, and it will be advisable to have cultural foods available in all the grocery stores so that international students can feel at home. Grocery stores around and on campuses must have markets that have culturally appropriate food to fit the needs of all international students.

5.2.3 Future Research

Given what we know on the topic "food insecurity among racialized international students", it is found that it is under researched even though it requires immediate attention. The only way to be heard is to incorporate concerns into research. This will further help play an important role in discovering the neglected deep-seated issues of food insecurity among racialized international students and again manage the conflicting information on food insecurity among this population. This multifaceted issue of food insecurity among racialized international students could be due to the complexity of the interest groups affected.

Future research should investigate measures that can be taken to prevent and resolve food insecurity and determine specific factors that contribute to food insecurity among international racialized students. Additionally, since only a few studies have exclusively studied food insecurity in international students, more research should be conducted in this area. International university students' food security status can be improved if school policies regarding international students were created to ensure that students are evaluated periodically to determine their food security status. These policies might also safeguard international student food security by making sure that student food banks are well-advertised and available for international student access. At present, the university has no such policies in existence for the international student population. It might also benefit universities to explore other interventions such as monthly or weekly events for international students that provide a free meal or classes on budgeting that promote more efficient grocery shopping practices. This is supported by Farahbakhsh et al.'s (2017) determination that government-based and university-based programs and policies are needed to improve food insecurity among university students. Since international students promote economic growth in

Canada, it is essential that universities take an interest in their nutritional well-being and overall health.

While the focus of the work was not centred around the relationship between accessing culturally appropriate food and academic performance, the study partly ascertains the inextricable link between accessing culturally appropriate food and academic performance of racialized international students using a simple correlation approach. The findings highlighted a direct relationship between access to culturally appropriate food and academic performance. A future study can expand on this area to explore other factors that influence such findings.

Hopefully, these findings will encourage future research to be conducted and further throw light on this issue and direct how to best amend food insecurity among international students studying in Canada on university campuses.

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APPENDICES

APPENDIX A

EMAIL ANNOUNCEMENT

MA Thesis on Food insecurity among racialized international students.

TO ALL RACIALIZED INTERNATIONAL STUDENTS

Are you interested in sharing your thoughts on food insecurity on campus and off? Do you have 15minutes to answer some questions on the topic and perhaps help improve access to adequate, healthy and culturally appropriate foods for yourself and others? As part of the graduate program in Sustainability Studies at Trent University, I am carrying out a study to discover the challenges racialized international students face accessing adequate, healthy and culturally appropriate food while documenting how food insecurity impacts academic performance and the international student experience.

You can find the survey here : https://trentu.qualtrics.com/jfe/form/SV_0NHOfmN9sCremDr

If you have any questions, please don't hesitate to contact me.

Thank You, in advance, for your consideration.

You can stop being in this study any time during the [survey or interview] and afterwards up to 01/05/2021. I have attached a copy of a letter of information about the study that gives you full details. This study has been reviewed and cleared by the Trent Research Ethics Board. If you any have concerns or questions about your rights as a participant or about the way the study is being conducted, you can contact:

The Trent Research Ethics Board

Telephone; 705 (748) 1011 Ext; 7050

E-mail: research@trentu.ca

Thank you very much for considering. After a week, you will be sent a one-time follow-up reminder.

Akua S. Agyemang

Masters Candidate in Sustainability Studies

Trent University, Peterborough, Ontario, Canada

Tel: 437-248-4832

akuaagyemang@trentu.ca

Michael Classens

Research Supervisor,Trent University,Canada.

Environmental Science Department

Tel ; 416-716-8804

michaelclassens@trentu.ca

APPENDIX B

ONLINE SURVEY QUESTIONS

Q1. What is your gender?

Male _____

Female _____

Other _____

Q2. How old are you?

_____

Q3. What is the name of your institution?

Trent University _____

University of Toronto _____

Q4. As an international student, what is your status?

Undergraduate level ___

Graduate level ____

Q5. Where is your country of origin?

_____

Q6. Do you identify as a member of a racialized community?

Yes_____

No_____

Q7. From which sources do you receive financial support during university? (check all that may apply)

Government /student loan _____

Personal savings _____

Financial support from family _____

Fulltime employment _____

Part-time employment _____

Q8. Are you currently on a meal plan from School?

Yes _____

No _____

Q9. Have you accessed emergency food provisioning service at any time during your study in Canada?

On campus_____

Off campus_____

Q10. Do you live on campus or off campus?

On campus _____

Off campus _____

Q11. Are you someone who likes to explore diverse foods apart from your culturally preferred foods?

Yes_____

No_____

Q12. How often do you eat culturally preferred meals?

Never _____

A little of the time _____

Sometimes _____

Most of the time _____

Always_____

Q13. Where do you get to buy culturally preferred foods?

Grocery stores near me _____

Travel far away to buy _____

I don't know where to access them _____

Others _____

Q14. Were there times when you could not afford to eat culturally preferred foods?

Never _____

A little of the time _____

Sometimes _____

Most of the time _____

Always_____

Q15. Have you ever been hungry but had food that did not suit your preference?

Never _____

A little of the time _____

Sometimes _____

Most of the time _____

Always_____

Q16. Were there times when you were not eating enough because there was no money to buy enough food?

Never _____

A little of the time _____

Sometimes _____

Most of the time _____

Always_____

Q17. To what extent have food access affected your ability to concentrate /focus in class. (Calculated based on performance in class).

Excellent _____

Very Good _____

Good _____

Fair _____

Poor _____

Q18. Thinking about your ability to keep up with your schoolwork. Would you say it is

Excellent _____

Very Good _____

Good _____

Fair _____

Poor _____

Q19. Now thinking about your academic performance in the last semester. Would you say average from? (this information will be kept confidential).

A (85%-89%)

A-(80%-84%)

B+ (77%-79%)

B- (73%-76%)

B (70%-72%)

C (62%-67%)

D (50%-59%)

F (0-49%)

Q20. Are you interested in a brief follow up interview online discussion? You will be asked to share your information about your experiences with food insecurity on and off campus on a Zoom meeting. You will have the right not to answer questions in discussions and can withdraw from research at any time.

Yes_____

No_____

Q20.A. If you answered yes from Q20 above, please leave your contact information below.

Name _____

Email_____

END

APPENDIX C

INTERVIEW QUESTIONS

Q1. What are some of the challenges to locating culturally appropriate food while in school?

Q2. Can you tell me about some of the coping mechanisms or strategies you use when you can't access culturally appropriate food?

Q3. What are some of the changes you want to see that will further ensure that culturally appropriate food is seen as a crucial aspect of student wellbeing?

APPENDIX D

INFORMED CONSENT FORM (ONLINE SURVEY)

Food insecurity among racialized international students

Letter of Information

Title of Research Project

Food insecurity among racialized international students.

Principal Investigator

Akua S. Agyemang

MA Sustainability Studies

Trent University

Peterborough, Ontario

akuaagyemang@trentu.ca

You have been invited to participate in a survey on Food insecurity among racialized international students. The survey can be completed online in 20minutes. Please review the consent information and contact the principal investigator if you have any questions.

Purpose of research

The purpose of the research is to explore the root causes and the implications associated with food insecurity among racialized international students at both Trent University and University of Toronto in Canada. This comparison will help illuminate subtle differences and unexpected similarities of racialized international students' food insecurity between the two universities in Canada. The project is designed to examine and understand the structure and policy elements that result in food insecurity among racialized international students at both universities.

What you will be asked to do in the research

This research cannot be conducted without your insights, knowledge, and perspectives. The research will require about 20minutes (maximum) of your time. The researcher request that you share your information about your experiences with food insecurity on and off campus. You will have the right to withdraw from research at any time. If you are interested in a follow-up brief interview discussion via Zoom, please leave your contact information. During the virtual meeting, you will be asked to share your information about your experiences with food insecurity on and

off campus. You will have the right not to answer questions in discussions and can withdraw from research at any time.

Risks and discomforts

There are no anticipated risks or discomforts related to this research.

You may find this research very enjoyable and rewarding as many international students do not get to share their experiences as you will. Additionally, the protection of your identity and contributions is assured. You are free to share as little or as much information in response to the question you feel comfortable with.

Benefits of the research and benefits to you

It is hoped that this research may lead to the development of a more formalized network to support shared communication among food systems communing initiatives and organizations across Canada, especially in postsecondary institutions.

Storage and protection of data

The data will be stored on my password protected computer. All information will be destroyed after 5years.

Voluntary participation

Your participation in this research is completely voluntary. You may choose to stop participating at any time. Your decision not to volunteer will not influence the relationship you may have with the researcher or in the future.

Withdrawal from the study

You can stop participating in the study at any time, for any reason, if you decide so. Your decision to stop participating or refuse to answer particular questions will not influence the relationship you may have with the researcher or in the future.

Confidentiality

This survey is completely anonymous. The researcher cannot identify who you are or associate your responses with your identity. If you decide to participate in a follow up interview, and leave your contact information on the completed survey, the researcher will make every possible effort to keep your participation in the survey and your survey responses confidential. Survey and interview information will be stored on a password protected computer in encrypted files. Your name will not be used in any publication or presentation in which the research is reported. Confidentiality will fully be provided.

Questions about the research?

If you have any questions, or ethics review process, you may contact any or all of the following people:

Michael Classens, Supervisor

michaelclassens@trentu.ca

Jamie Muckle, Certifications and Regulatory Compliance Officer

jmuckle@trentu.ca

Legal rights

I -- Consent to participate in the "food insecurity among racialized international students "research project. I have understood the nature of this project and wish to participate.

APPENDIX E

INFORMED CONSENT FORM (SEMI-STRUCTURED INTERVIEWS)

Food insecurity among racialized international students

Principal Investigator

Akua S. Agyemang

MA Sustainability Studies

Trent University

Peterborough, Ontario

akuaagyemang@trentu.ca

Purpose of research

The purpose of the research is to explore the root causes and the implications associated with food insecurity among racialized international students at both Trent University and University of Toronto in Canada. This comparison will help illuminate subtle differences and unexpected similarities of racialized international students' food insecurity between the two universities in Canada. The project is designed to examine and understand the structure and policy elements that result in food insecurity among racialized international students at both universities.

What you will be asked to do in the research

This research cannot be conducted without your insights, knowledge, and perspectives. The research will require about 40minutes (maximum) of your time. The researcher requests that you agree to participate in a brief semi-structured interview (via phone call, Zoom, Skype). During the virtual meeting, you will be asked to share your information about your experiences with food insecurity on and off campus. You will have the right not to answer questions in discussions and can withdraw from research at any time.

Risks and discomforts

There are no anticipated risks or discomforts related to this research.

You may find the interview very enjoyable and rewarding as many international students do not get to share their experiences as you will. Additionally, the protection of your identity and contributions is assured in the virtual meetings. You are free to share as little or as much information in response to the question you feel comfortable with.

Benefits of the research and benefits to you

It is hoped that this research may lead to the development of a more formalized network to support shared communication among food systems communing initiatives and organizations across Canada, especially in postsecondary institutions. You may experience no direct benefit but may also value the meeting as a knowledge-sharing event.

How the data will be used

Meeting notes and observations will be gathered during the meetings. The data may be included in a number of outputs: possibly within a context of conference and public presentations, articles in the academic and popular press.

Storage and protection of data

The data will be stored on my password protected computer. All information will be destroyed after 5years.

Voluntary participation

Your participation in this research is completely voluntary. You may choose to stop participating at any time. Your decision whether or not you decide to participate in this study will have no effect on the relationship with your university or the international offices. Neither will it influence the relationship you may have with the researcher or in the future.

Withdrawal from the study

You can stop participating in the study at any time, for any reason, if you decide so. Your decision to stop participating or refuse to answer particular questions will not influence the relationship you may have with the researcher or in the future.

Confidentiality

The researcher will make every possible effort to keep your participation and responses confidential. Survey and interview information will be stored on a password protected computer in encrypted files. Your name will not be used in any publication or presentation in which the research is reported. Confidentiality will fully be provided.

Questions about the research?

If you have any questions , or ethics review process, you may contact any or all of the following people:

Michael Classens, Supervisor

michaelclassens@trentu.ca

Akua Agyemang, Principal Investigator

akuaagyemang@trentu.ca

Jamie Muckle, Certifications and Regulatory Compliance Officer

jmuckle@trentu.ca

Additional consent

I consent to being audio recorded. The recording will not be shared with anyone other than me without your prior written consent. The recordings, or parts thereof, will be transcribed. The audio recordings will be kept on my password protected laptop for up to 5 years, at which point the data will be destroyed. The meetings will only be audio recorded if participants agree.

APPENDIX F

SUMMARY OF ALL VARIABLES (Online survey)

Variable	Frequency	Percent
Gender		
Male	43	40
Female	54	50
Other	1	1
No response	9	8
Total	107	100
Age		
Between 17-21 years	49	46
Between 22-26 years	34	32
Above 26 years	17	16
No response	7	7
Total	107	100
Status		
Undergraduate level	72	67
Graduate level	24	22
No response	11	10
Total	107	100
Institution		
Trent University	31	29
University of Toronto	67	63
No response	9	8
Total	107	100
Country of Origin		
Asia	57	53
America	4	4
South America	3	3
Europe	7	7
West Africa	16	15
Middle East	1	1
South Africa	10	9
No response	9	8
Total	107	100
Thinking about your ability to keep up with your schoolwork. Would you say it is?		
Excellent	16	15
Very Good	21	20
Good	34	32
Fair	21	20
Poor	10	9

No response	5	5
Total	107	100.0
Are you currently on a meal plan from School?	Frequency	Percent
Yes	20	19
No	70	65
No response	17	16
Total	107	100
Have you accessed emergency food provisioning service at any time during your study in Canada?		
On campus	12	11.0
Off campus	35	33.0
Not at all	52	48.0
No response	8	8.0
Total	107	100.0
Do you live on campus or off campus?		
On campus	11	10
Off campus	89	83
No response	7	7
Total	107	100.0
Are you someone who likes to explore diverse foods apart from your culturally preferred foods?		
Yes	76	71
No	23	21
No response	8	8
Total	107	100
How often do you eat culturally preferred meals?		
Never	6	6.0
A little of the time	15	14.0
Sometimes	35	33.0
Most of the time	30	28.0
Always	9	8.0
No response	12	11.0
Total	107	100.0
Where do you get to buy culturally preferred foods?		
Grocery stores near me	39	36.0
Travel far away to buy food	27	25.0
I don't know where to access them	15	14.0
Others	19	18.0
System	7	7.0
Total	107	100.0

Where do you get to buy culturally preferred foods? - Others	Frequency	Percent
External meal plan/restaurants	18	17.0
Food panda and cooking	15	14.0
Mails from my home country, or uber eats	9	8.0
My parents send them over to me.	15	14.0
Try to cook by myself	18	17.0
Uber	21	20.0
No response	11	10.0
Total	107	100.0
Were there times when you could not afford to eat culturally preferred foods?		
Never	25	23
A little of the time	25	23
Sometimes	32	30
Most of the time	18	17
No response	7	7
Total	107	100
From which sources do you receive financial support during university		
Government /Student Loan		3
Personal Savings		16
Financial support from family		47
Full-time Employment		1
Part-time Employment		23
Scholarships		3
Others		2
No response		5

APPENDIX G

Table 4.3a: Relationship between difficulty in accessing cultural preferred foods and how it affects their academic performance.

Correlations

		To what extent have food access affected your ability to concentrate /focus in class.	Do you think food access affect your grades
To what extent have food access affected your ability to concentrate /focus in class.	Pearson Correlation	1	.119
	Sig. (2-tailed)		.38
	N	107	107
Do you think food access affect your grades?	Pearson Correlation	.119	1
	Sig. (2-tailed)	.38	
	N	107	107

APPENDIX H

REPRESENTATIVE INTERNATIONAL FOOD AVAILABILITY AROUND UNIVERSITY OF TORONTO SCARBOROUGH (TORONTO) AND TRENT UNIVERSITY (PETERBOROUGH)

Table 2.1

MARKETS & RESTAURANTS	TORONTO LOCATION
AFROCAN Supermarket	2121 Jane St
Nyam Nyam	4381 Kingston Rd
Adonai African Grocery Store	4164 Kingston Rd
Solaso Foods	3873 Lawrence Ave E
African Freshness Superstore	2500 Lawrence Ave
Akhigbe Nigerian Caterer	1960 Lawrence Ave E
Sahan Restaurant	2010 Lawrence Ave
Perfect Chinese Restaurant	4386 Sheppard Ave E
Scarborough Buffet	91 Rylande Blvd
House of Wong	4601 Kingston Rd
The Nigrils Restaurant	3021 Markham Rd
Asian Legend	4452 Sheppard Ave
Ghana Chops Scarborough	269 Morningside Ave
The Spot Jamaican Food	3863 Lawrence Ave E
Kitchen King	885 Progress Ave
Oyato Food African Market	North York
Pristine Fine Food Supermarket	339 Evans Ave
Zee World African Store	4800 Sheppard Ave
Island Spice	365 Pitfield Rd
The Royal Chinese Restaurant	3587 Sheppard Ave E
Pili Pili	1960 Lawrence Ave E
Bi Dazeld Catering	3560 St Clair Ave E
Grocery Africa Store $ Takeout	4679 Kingston Rd
Mudfarm Organics Botanicals Inc	1063 Midland Ave
Chung Moi Chinese Restaurant	2412 Eglinton Ave E
Rose's Halal Kitchen	2602 Eglinton Ave E
Crown Jewel Fine Dining	325 Bamburgh Cir
Africa Restaurant	2000 Meadowvale Rd
Negril's Jerk Hut	1730 Lawrence Ave E
The South African Store	3889 Bathurst St
Phoenix	3730 Kingston Rd
Very Fair Chines Restaurant	4002 Sheppard Avenue E

MARKETS & RESTAURANT	PETERBOROUGH LOCATION
African Mission Growth Market	193 Simcoe St
Goodies on George	429 George St
Thai Express Restaurant	645 Lansdowne St W
Wee Wok Express	337 George St S
Ng Saigon Boys	1524 Lansdowne St
Tacheena Middle Eastern Cuisine	1123 Water St
The Food Forest	135 Hunter St W
Dante's Gourmet Burrito	195 Simcoe St
Fusion Bowl	376 George St N
Schnitzel House	901 Landsdowne St W
Yees Garden Chinese Foods	119 Parkhill Rd W
Island Cream Caribbean Cuisine	1123 Water St
Golden Wheel Restaurant	6725 Trans-Canada Hwy