A Mixed Methods Study of Immigrant and Canadian-Born Pakistani Youths' Mental Health in Canada: Resilience, Identity and Self-Esteem

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Abstract

The mental health and wellbeing of immigrant minority youth in multicultural societies is shaped by a constellation of social factors which determine their health. Some of these factors include race, ethnicity, gender, religion, age, immigration status, social supports and socioeconomic status. Little is known about the mental health issues of immigrant and Canadian-born Pakistani youth in Canada. In order to fill this gap, this study was undertaken. ***Purpose*****:** The goal of this study was to explore the perspectives of immigrant and Canadian-born Pakistani youth regarding their mental health and to measure their self-rated mental health, self-esteem, resilience and ethnic identity. ***Method*****:** An embedded concurrent mixed methods study was utilized as per Creswell & Plano Clark (2017). The survey component was completed by 81 youth for the quantitative arm of the study. Individual interviews with 8 youth, 4 parents and 2 service providers were conducted for the qualitative arm. In addition, 3 focus groups with youth and 2 with parents were conducted. ***Results:*** Quantitative arm: There was a significant difference in household income by region of birth [χ^2 (4, n = 81) = 14.59, p = .006] and by generation status [χ^2 (8, n = 81) = 19.822, p = .011]. Health (*Health Composite*) was correlated with self-esteem (CSE) (r = 0.726, p < .001). Multiple regression found income was associated with *Health Composite* (Wald F =3.951, p = .047). Qualitative arm data analysis identified 13 themes, of these 11 related to factors influencing immigrant Pakistani youths' mental health. Mixed methods analysis found 9 themes common to both arms: Resilience, mental health cases, mental health supports, dissatisfaction with treatment and supports, stigma, financial difficulties and impact on mental health, identity and acculturation issues, discrimination, justice, fairness and social exclusion. Findings showed that qualitative and quantitative (survey) data may lead to opposite results: race, identity and acculturation affected youths' mental health positively

(quantitative) and negatively (qualitative). ***Conclusion*****:** Strategies to overcome mental health challenges in immigrant Pakistani youth should include family counselling, integrating faith-based counselling, destigmatizing Islam, guaranteed employment for newcomer families and non-discriminatory national policies that promote social and cultural inclusion.

Dedication

To every immigrant who made Canada their home.

In memory of my parents.

To my family.

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Table of Contents

Abstract ii
Dedication iv
Acknowledgment v
Table of Contents vi
List of Abbreviations x
List of Tables xi
List of Figures xii
Chapter 1: Introduction 1
1.1 Background to The Study 4
1.2 Overview of Thesis Focus 5
1.3 Dissertation Outline 7
1.4 Theoretical Concepts 8
1.4.1 The Social Determinants of Health. 9
1.4.2 Systems Perspective 10
1.4.3 Sensitizing Concepts and Key Terms 13
1.5 Chapter Summary and Rationale for Applying Theoretical Concepts 17
Chapter 2: Literature Review 19
2.1 The Pakistani Diaspora 19
2.2 The Healthy Immigrant Effect 21
2.3 Social Determinants of Mental Health among Immigrants 23
2.4 Mental Health and Illness among Immigrant South Asians 25
2.5 Youth and Mental Health 27
2.6 Immigrant Youth and Mental Health 28
2.6.1 Gender Differences in Mental Health 29
2.7 Acculturation Process and Variants 31
2.7.1 Factors that Moderate Acculturation 34
2.8 Ethnic Identity, Self-Esteem and Resilience in Youth 35
2.8.1 Ethnic Identity 35

2.8.1.1 Gender and Ethnic Identity 36
2.8.2 Self-Esteem 37
2.8.2.1 Gender and Self-Esteem 39
2.8.3 Resilience 40
2.8.3.1 Gender and Resilience 41
2.9 Chapter Summary and Study Rationale 42
Chapter 3: Research Methods 46
3.1 Mixed Methods: Design Overview 46
3.2 Research Questions 47
3.4 Quantitative Arm of Study 50
3.4.1 Data Collection 50
3.4.2 Data Compilation and Recoding of Variables 60
3.4.3 Quantitative Data Analysis 61
3.5 Qualitative Arm of the Study 63
3.5.1 Data Collection 64
3.5.2 Qualitative Data Analysis 69
3.5.5 Rigor and Trustworthiness 70
3.5 Chapter Summary 72
Chapter 4: Quantitative Arm Study Results 73
4.1 Demographic Characteristics of Youth 73
4.2 Household Income by Migration Groups 76
4.3 Descriptive Statistics: *Health Composite* and Subcomponents 79
4.4 Intercorrelations of Individual Component of Health Composite 80
4.5 Correlations: Health Composite, Ethnic Identity, Self-Esteem, and Resilience 81
4.6 Multiple Binary Logistic Regression 81
4.7 Descriptive Statistics: Ethnic Identity, Self-Esteem and Resilience 84
4.8 Multiple Linear Regressions to Predict Self-Esteem, Ethnic Identity and Resilience 86
4.9 Qualitative Open-Ended Questions on the Survey 90
4.9.1 Help or Treatment for Mental Health 90
4.9.2 Emerging Themes on Current Self-Esteem Scale (Open-Ended Questions) 93
4.10 Chapter Summary 97

Chapter 5: Qualitative Arm Study Results 98
5.1 Characteristics of Participants 99
5.1.1 Youth 99
5.1.2 Parents and Service Providers 100
5.2 Youth and Parents' Definition of Mental Health 101
5.3 Factors That Influence Immigrant Pakistani Youths' Mental Health 104
5.3.1 Micro-Level Factors 106
5.3.2 Meso-Level Factors 115
5.3.3 Macro-Level Factors 121
5.4 Experiences with Mental Illness, Healthcare and Help Seeking 133
5.6 Chapter Summary 137
Chapter 6: Mixed Methods: Integration of QUAN and Qual Results 138
6.1: Data Reduction and Transformation 141
6.2: Data Comparison and Integration 143
6.3: Summary of Mixed Methods Findings 145
Chapter 7: Discussion and Conclusion 147
7.1: Summary of the Study 147
7.2: Discussion of Findings 148
7.2.1 Gender Differences in Mental Health and Other Attributes of Wellbeing 161
7.3: Application of Theoretical Frameworks 163
7.3.1: Development of the Systems Conceptual Model 163
7.3.2: Social Determinants of Pakistani Youth Mental Health 166
7.4: Strengths of Study and Contributions to New Knowledge 168
7.5: Study Limitations 169
7.5: Conclusion and Recommendations 171
7.5.1 Research Implications 172
7.5.2 Practice and Policy Implications 173
References 179
APPENDIX A: Recruitment Flyer for Immigrant and Canadian-Born Pakistani Youth 238
APPENDIX B: Recruitment Flyer for Immigrant Pakistani Parents 239
APPENDIX C: Youth Survey Questionnaire 240

APPENDIX D: In-Depth Interview Guide with Demographics for Youth 247
APPENDIX E: In-Depth Interview Guide with Demographics for Parents 249
APPENDIX F: In-Depth Interview Guide with Demographics for Service Providers 251
APPENDIX G: Focus Group Guide for Youth 253
APPENDIX H: Focus Group Guide for Parents 254
APPENDIX I: Informed Consent to Participate in the Research Study 255
APPENDIX I: Summary Table of Multigroup Ethnic Identity Measure (MEIM) Items 259
APPENDIX J: Summary Table of Child and Youth Resilience Measure CYRM-12 260

List of Abbreviations

CCHS	Canadian Community Health Survey
CSE	Current Self-Esteem Scale
CYRM-12	Child Youth & Resilience Measure for Youth
GNP	Gross National Product
GTA	Greater Toronto Area
HIE	Healthy Immigrant Effect
MEIM	Multigroup Ethnic Identity Measure
MHASEF	Mental Health and Addictions Scorecard and Evaluation Framework
NSEERS	National Security Entry-Exit Registration System
OCASI	Ontario Council of Agencies Serving Immigrants
QUAN	Quantitative
SDOH	Social Determinants of Health
SES	Socioeconomic Status
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United State of America
WHO	World Health Organization

List of Tables

Table 1: Survey Items and Their Sources 55
Table 2: Qualitative Arm: Participant Selection 66
Table 3: Demographic Characteristics of Sample 74
Table 4: Characteristics of Youth by Region of Birth 75
Table 5: Characteristics of Youth by Generation Status 76
Table 6: Health and Well-Being Ratings 79
Table 7: Mean and SD of Health Composite and Subitems by Gender and Region of Birth 79
Table 8: Mean and SD of Health Composite and Subitems by Generation Status 80
Table 9: Intercorrelations Between Health Composite Subitems 81
Table 10: Correlations Matrix: Health Composite, Resilience, Self-Esteem and Ethnic Identity 81
Table 11: Reference Groups and Dummy Variables for Predictor Variables 82
Table 12: Multiple Logistic Regression to Predict Health Composite 83
Table 13: Mean and SDs of Self-Esteem, Resilience and Ethnic Identity 85
Table 14: Multiple Linear Regression Predicting Self-Esteem 86
Table 15: Multiple Linear Regression Predicting Ethnic Identity 87
Table 16: Multiple Linear Regression Predicting Resilience 88
Table 17: Results Supporting Research Hypotheses 89
Table 18: Summary of Responses: Treatment for Mental Health Problems 91
Table 19: Current Self-Esteem Scale: Summary of Responses to Open-Ended Questions 94
Table 20: Demographics Characteristics of Individual Interview and FGD Participants 100
Table 21: How Youths and Parents Defined Mental Health 102
Table 22: Factors Influencing the Mental Health of Immigrant Pakistani Youth 105
Table 23: Summary of Triangulated Themes Across Interviews and Focus Groups 140
Table 24: Narrative Summary: Quantitative Survey Responses 142
Table 25: Comparison of Qual Interview Data and QUAN Survey Data 143
Table 26: Comparison of Themes: Systems Conceptual Models from 2 Studies (Thesis and Comprehensive Review Paper) 165
Table 27: Recommendations to Improve Immigrant Pakistani Youths’ Mental Health 174

List of Figures

Figure 1: A Conceptual Framework: A Systems Presentation of Influences on Immigrant Youths' Mental Health... 12
Figure 2: Visual Diagram: Concurrent Embedded Mixed Methods Research Design................. 47
Figure 3: Household Income by Region of Birth.. 77
Figure 4: Household Income by Generation Status 78
Figure 5: Ethnic Groups: Youth Self-Identification 84
Figure 6: Factors Influencing Treatment for Mental Health Problems... 92
Figure 7: Embedded Concurrent Mixed Methods: Data Analytic Process................................ 139
Figure 8: Factors that Influence Immigrant Pakistani Youth... 163

Chapter 1: Introduction

> Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Mental health is conceptualized as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (World Health Organization, 2018, para 1, 2).

This doctoral dissertation is about the mental health and wellbeing of immigrant youth in the context of the challenges and opportunities they experience as they settle in immigrant-receiving countries. Specifically, my dissertation explores the perceptions of mental health of immigrant and Canadian-born Pakistani youth living in the Greater Toronto Area, in the Province of Ontario, Canada and their self-rated mental health, self-esteem, resilience and ethnic identity.

Emerging adulthood (age 18-25 years) is an important developmental life stage. As youth transition from adolescence to adulthood they undergo physiological, psychological, and social changes. During this period, they develop their unique identities through a process of exploration, navigation, and negotiation. As they gain adult privileges, they learn to take on adult responsibilities, and at the same time, they become exposed to new risks and opportunities. Immigrant youth specifically may encounter additional pre-migration, during migration, and post-migration challenges (Kirmayer, Narasiah, Munoz, Rashid, & et, 2011). These youth and their families experience increased stress associated with language barriers, culture differences, and migration-related losses (such as loss of income, social status, family support and social networks) (Das-Munshi, Leavey, Stanfeld, & Prince , 2012). The intensity and duration of their

post-migration challenges is linked with their experienced stress (Das-Munshi et al., 2012). Exposure to adversities and the complexities of dealing with school adjustment, discrimination and reconfigured family life in the new post-migration settings may increase the risk of mental health problems in migrant youth (Fazel & Betancourt, Preventive mental health interventions for refugee children and adolescents in high-income settings, 2018). Migration-related stress can also enhance underlying mental health vulnerabilities. When pre-existing mental health conditions exist, stress related events can further exacerbate symptoms (Dykxhoorn, et al., 2019). Most mental illnesses start early in early life, 50% occur by the age of 14 and 75% by the age of mid-20s (World Health Organization, 2020a). Mental health problems can affect healthy youth development, and educational and career attainment. They pose a threat to a fulfilling and productive life for youth. If untreated (or treated inadequately), mental health problems can lead to lifelong disability (World Health Organization, 2020a).

An array of individual and contextual factors shape the settlement experiences that can influence the mental health of immigrants: age at migration (Leão, Sundquist, Johansson, & Sundquist, 2009); region of birth (Ali, 2002); country of birth (Bourque, van der Ven, & Malla, 2011); migration status and visible minority status among others (Anderson, Cheng, Susser, McKenzie, & Kurdyak, 2015; Kirmayer, et al., 2011). Anderson et al. (2015) found the risk of psychotic disorders among refugee and immigrants in Ontario, Canada varied across ethnic subgroups and income quintiles; immigrants from South Asia had a significantly higher risk compared to the general population; and migrants living in the highest income neighbourhoods had the lowest risk. Further, the risk of psychotic disorders was linked to migration-related psychosocial and cultural factors such as linguistic capacity, educational and economic status (Anderson et al., 2015). Research also shows a post-migration downward shift in socioeconomic

status and lowered quality of life affects mental health. For example, a meta-analysis on migration and social mobility concluded that downward intragenerational social mobility was strongly associated to migration and mental illness (Das-Munshi et al., 2012). The downward social mobility in immigrants was attributed to being employed in low wage and less skilled occupations because of non-recognition of professional qualifications, job skills, and work experience of arriving immigrants (Das-Munshi et al., 2012; Gans, 2009).

Increased rates of mental health disorders among children and youth globally, and in minority youth populations in immigrant receiving Western countries, as a result of international migration, necessitate identification of risk factors and mental health promoting factors among immigrant youth groups. This task is complicated in multicultural Canada where over 250 ethnic origins and distinct cultures are reported (Statistics Canada, 2017). Ethnocultural groups differ in language and cultural beliefs and may also differ in their understanding of mental illness, stress management, coping practices and mental healthcare seeking behaviour. International migration accounts for 80% of Canadian population growth (Government of Canada, 2018). Pakistan is among the major immigrant source countries from Asia: immigrants from Pakistan constitute the fifth largest racialized cultural group in Canada (Statistics Canada, 2016). Yet, immigrant Pakistani youth are a highly understudied group in Canadian literature. Presumptions about immigrant Pakistani's health outcomes based on mainstream population health estimates or larger ethno-racial group estimates (such as South Asian health estimates) may not provide a clear picture of their mental health status or mental health concerns. What is missing in current research is in-depth examination of the mental health needs within racialized immigrant ethnic subgroups. To my knowledge, no prior research has focussed on the mental health experiences of Pakistani youth in Canada, and in particular exploring whether the mental issues facing

immigrant Pakistani youth are similar to, or different from, other immigrant youth. In Chapter one, I discuss the background to my study, followed by an overview of my thesis focus. Then I present an outline of my dissertation and in the last section of this chapter, I describe the theoretical concepts that ground my study.

1.1 Background to The Study

My doctoral dissertation explores the perspectives and experiences of immigrant and Canadian-born Pakistani youth regarding mental health in the context of their social, cultural and economic environments. The perspectives of parents are also considered. I also measure and examine differences in self-reported health, self-esteem, resilience, and ethnic identity between Pakistani-born and Canadian-born immigrant youth of Pakistani background. My interest in this research inquiry stems from my passion to understand the complex nature of mental health within immigrant populations. This intersects with my own experiences as a skilled immigrant settling in Canada. As a medical doctor and public health specialist, I have experience providing direct healthcare to, and promoting mental health among, Pakistani populations experiencing mental health problems. This experience and a shared cultural understanding (an insider view) (Ganga & Scott, 2006) in conjunction with my previous research work on immigrant youth mental health gave me an advantage (Bourke, 2014). It allowed me to critically reflect on the intersection of race, income, gender, religion, culture and other structural and systemic inequities that shape the mental health of immigrant Pakistani youth. A common culture between the researcher/interviewer and participants can provide unique opportunities throughout the research process, in particular when interviews are conducted away from the participants' homeland and the perceived mutual sameness can enhance trust and openness (Merriam, et al., 2000).

Before I embarked on my dissertation study, I conducted a scoping review on immigrant and refugee youth mental health to explore what is known on the topic and to identify current gaps in the literature (Khan, Khanlou, Stol, & Tran, 2018). The review, which was one of my comprehensive papers, identified major challenges and barriers to migrant youths' mental health and wellbeing. My review findings echo previous work published on migrant youth mental health (Edge, Newbold, & McKeary, 2014; Khanlou & Jackson, 2010). The scoping review findings are described in more detail in the Systems Perspectives section of this chapter. In summary, the review emphasized that immigrant and refugee youths' mental health issues can be addressed by removing visible and invisible barriers to mental health promotion, prevention and mental healthcare, and increasing access to enabling factors (Khan et al., 2018).

1.2 Overview of Thesis Focus

Migration is a key driver of population growth in Canada and accounts for approximately two-thirds of Canada's population growth (Statistics Canada, 2019). Immigrants are critical in enriching Canada's economy and society. Culture influences how immigrants express mental illness, and how they seek and choose treatments (Mental Health Commission of Canada, 2019). Mainstream mental health care is often not aligned with the values, patterns, and expectations of migrant populations (Mental Health Commission of Canada, 2019). Race and ethnicity play an important role in the quality of healthcare immigrant groups receive (Durbin, Moineddin, Lin, Steele, & Glazier, 2015; Mental Health Commission of Canada, 2016) and predicted health outcomes (Access Alliance, 2007; Adler & Rehkopf, 2008; Islam, Khanlou, & Tamim, 2014). Several Canadian and American researchers have examined the mental health of migrant youth from diverse ethnocultural backgrounds including newcomer migrant youth from Korea, Macau, Russia, Taiwan, and China (Khanlou & Crawford, 2006), Cambodian refugee youth (Rousseau,

Drapeau, & Platt, 2004), Southeast Asian youth (Hilario, Vo, Johnson, & Saewyc, 2014; Hyman, Vu, & Beiser, 2000), and South Asian youth (Islam, Multani, Hynie, Shakya, & McKenzie, 2017).

The South Asian population in Canada is a very diverse group as they differ in their country of origin, ethnicity, language, cultural, religious beliefs, diet and lifestyle, and health practices. Yet, mental health research on immigrant and racialized youth of Asian and South Asian heritage in Canada largely lumps them together (Ahmed, et al., 2005; Islam et al., 2014; Mehta, 1998; Surood & Lai, 2010; Tiwari & Wang, 2008). The Mental Health Commission of Canada (2019) emphasizes that to address inequities in mental health there is need for research examinining: 1) the mental health needs *within* ethnic subgroups, and 2) mental health differrences between *racialized immigrant* groups and *racialized Canadian-born* groups. Identifying the countless differences and specific needs within immigrant and racialized populations and how they influence their health and mental health is essential to addressing health and mental health inequities (Mental Health Commission of Canada, 2019, p. 5).

Research from England, Denmark, and Norway has explored immigrant Pakistani youths' mental health, and psychological attributes. For example, Shah and colleagues (Shah, Dwyer, & Modood, 2010) examined the ethnic capital of British Pakistani youth; Ramji's study examined the intersection of ethnic identity and employment amongst young British Pakistani men (Ramji, 2005); Østberg (2003) examined how Norwegian-Pakistani adolescents negotiate religion, gender, ethnicity and social boundaries; and Rytter (2010) explored identity and belonging among Danish Pakistani youth. Research in Canada in the field of immigrant mental health has largely focused on adult Pakistani populations (Khan & Watson, 2005; Jibeena & Khalid, 2010), with little to no attention to the mental health of immigrant and Canadian-born Pakistani youth.

My study focusses on immigrant and Canadian-born Pakistani youths' understanding and their experiences of mental health in the context of family, school and the broader society in which they live. I also examine the psychological factors that shape the mental health and wellbeing[1] of Pakistani youth, including self-esteem, resilience and ethnic identity.
The perspectives of immigrant parents and service providers on youth mental health are also captured in the study. I use a mixed methods research design of inquiry to study the population of interest.

1.3 Dissertation Outline

My dissertation consists of seven chapters, Introduction, Literature Review, Research Methods, Quantitative Arm Study Results, Qualitative Arm Study Results, Mixed Methods: Integration of QUAN and Qual Results, and Discussion and Conclusion. Chapter one: Introduction provided the study background, and overview of my thesis focus. In the following section I present the theoretical concepts that guide the interpretation of my data, which include the Social Determinants of Health (SDOH), and Systems Theory. The sensitizing concepts and key terms utilized in my study are also discussed. Chapter two is a review of the literature, beginning with an overview of the Pakistani diaspora in Canada and the healthy immigrant phenomenon. Next, the factors, processes and psychological attributes that shape immigrant youths' mental health in multicultural societies are discussed. These include the Social Determinants of Health, acculturation, ethnic identity, self-esteem, and resilience. In Chapter three, I provide an overview of mixed methods research design, a detailed description of data

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[1] According to Merriam-Webster dictionary wellbeing is "the state of being happy, healthy, or prosperous." Wellbeing includes having good mental health, being socially connected and content with life, and having a sense of meaning or purpose (Psychology today, 2 Jan 2019). Retrieved 15 May 2020 from: https://www.psychologytoday.com/us/blog/click-here-happiness/201901/what-is-well-being-definition-types-and-well-being-skills

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collection and data analysis. The survey questionnaire, the interview guides for the youth, parents and service providers, and focus group guides for the youth and parents are given in Appendices C, D, E, F, G and H. In this Chapter I provide a description of analysis of my quantitative data (used SPSS statistical software) and qualitative data (hand coded content analysis and qualitative descriptive analysis). I also identify the challenges I encountered during data gathering.

In Chapter four, the results of the quantitative arm of my study are presented in tables, boxes and figures, and further described in detail in the text. In Chapter five, the results of the qualitative arm are organized using a Systems Approach. Participants' direct quotes expressing their views on youth mental health further enrich the findings. In Chapter six, the mixed methods results are presented as summaries of findings and as integrated results. In Chapter seven, I discuss the important findings from the study and relate them to existing literature. Findings are further examined in light of the theoretical concepts that inform my study. I outline the contributions my study makes to new knowledge and its limitations and how they were mitigated. Lastly, Chapter seven concludes with implications and directions for future research and recommendations to address the mental health of immigrant youth though practice.

1.4 Theoretical Concepts

In this section I present two theoretical concepts that inform my study. The Social Determinants of Health Framework is useful for examining how health inequalities are created and for identifying public policies that can reduce health inequities. Next, I describe the Systems Perspective that considers the influence of the environment on an individual's development. These frameworks allow for a holistic understanding of immigrant and Canadian-born Pakistani youths' health, mental health and well being by taking account of their social environments.

Lastly, I explain the meaning of the sensitizing concepts. The key terms explained in this section serve as a quick reference for the terms used in the thesis.

1.4.1 The Social Determinants of Health.

The Social Determinants of the Health are the conditions in which people are born, grow, live, work and age (Commission on Social Determinants of Health, 2008). There are 17 SDOH that shape the health and wellbeing of Canadians. These are: income and income distribution, education, unemployment and job security, employment and working conditions, early childhood development, food insecurity, housing, social exclusion, social safety networks, health services, Indigenous ancestry, gender, race, disability, geography, globalization and immigration status (Raphael, Bryant, Mikkonen, & Raphael, 2020). The SDOH Framework informs both the quantitative and the qualitative arms of my study from data gathering to data analysis. The determinants of health which impact immigrant and Canadian-born Pakistani youths' mental health, specifically income, education, unemployment and job security, employment and working conditions, housing, social exclusion, social safety networks, health services, gender, race, geography and immigrant status are considered.

To understand the significance of the SDOH in shaping the mental health of immigrant youth, it is essential to explain what health inequity is. Health inequity is the unequal distribution of resources between populations that shapes their health. Health inequities are avoidable, unfair, unjust and remediable health differences (Braveman, et al., 2011; World Health Organization, 2016). The source of health inequities are the structural determinants of health that influence distribution of resources and include the societal processes of power, colonisation, social stratification (Commission on Social Determinants of Health, 2008), jurisdictional public policy and the political ideological environment (Raphael, 2017).

Inequalities around the world are sustained by the prevailing social, political and economic forces and, as a result, individuals and groups that have less access to material resources and lack access to privilege, power and policy making are at a higher risk of experiencing poor mental health and developing mental illness (Commission on Social Determinants of Health, 2008; World Health Organization and Calouste Gulbenkian Foundation, 2014). Exposure to unfavourable SDOH impacts the mental health of vulnerable groups who may be at increased risk of distress, anxiety and depression (World Health Organization and Calouste Gulbenkian Foundation, 2014).

The social gradient in health refers to the evidence that the health status of individuals is directly related their social status. That is people who have lower socioeconomic position report worse health, and shorter lives than those who are more advantaged (Donkin, 2014). This means that individuals lower down on the social hierarchy suffer more from disease and die earlier than those on the higher end of the social hierarchy (Wilkinson, Richard G, Marmot, Michael, World Health Organization, 1998). Health equity is providing individuals or groups of people a fair chance to use their ability to reach their full health potential (National Collaborating Centre for Determinants of Health, 2013). In my study I examine these issues by considering the association of health with household income, region of birth, and generational status. Findings reveal the importance of the SDOH in immigrant and Canadian-born Pakistani youths' mental health and wellbeing.

1.4.2 Systems Perspective

My thesis is also informed by the Systems Perspective, which considers society as a complex interaction of elements (including people), and how these relate to the whole system (such as a country). The Systems Perspective utilizes the macro, meso and micro levels of

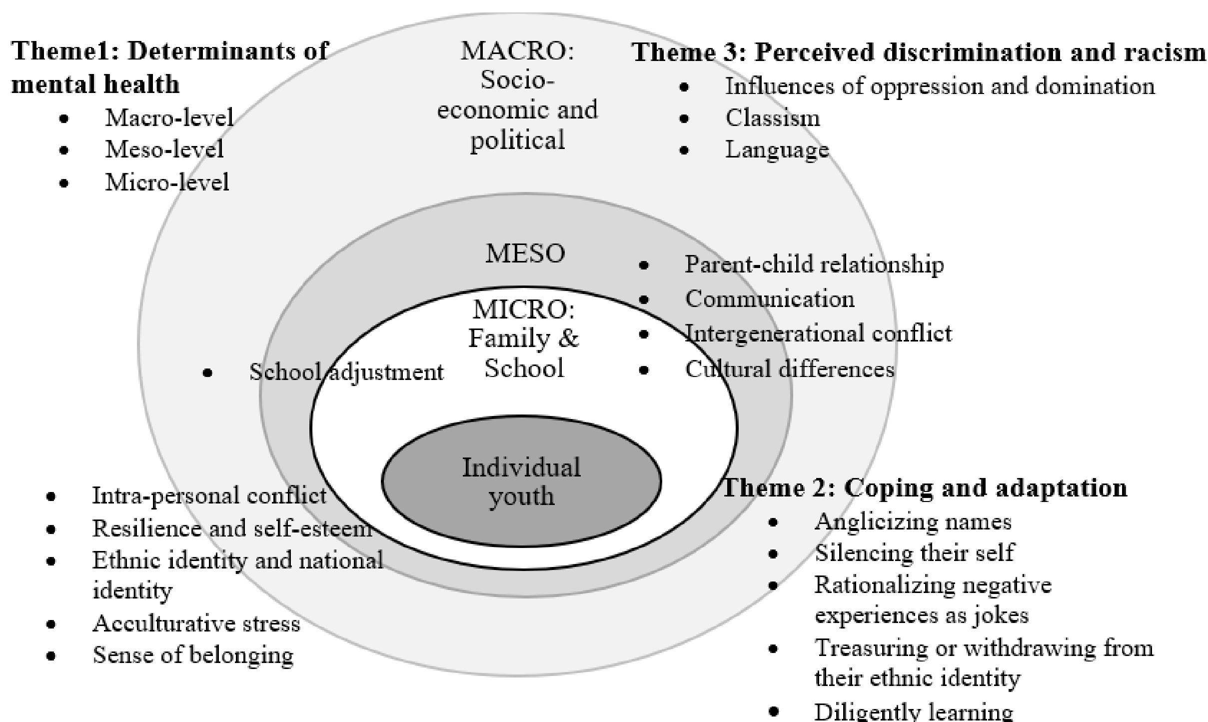
analysis, and mirrors the socioecological model of human development (Bronfenbrenner, 1979). This model conceptualizes an individual's socialization occurs within their environment through a system of relationships (Onwuegbuzie, Collins, & Frels, 2013). Two studies by Khanlou and colleagues, one on post-secondary students' mental health (Khanlou, 2019) and another on immigrant youths' experiences of cultural identity and migration (Khanlou, Bender, Mill, Vazquez, & Rojas, 2018) apply the Systems Perspective. Khanlou and colleagues (2018) referred to the following three layers of influences on youth in Canada: 1) the micro-level was the social environment immediately surrounding the youth, including family, friends, peers, academic institutions, and community networks; 2) the meso-level included the migration systems and policies, and employment system; and 3) the macro system was the larger sociopolitical context, including changing national socio-economic gradients, migration, language, religion, and racism. In my study the Systems Perspective takes into account that immigrant and Canadian-born Pakistani youths' physical and mental health and wellbeing are shaped by the family environment and the dominant culture outside their home such as the social, economic, cultural and political structures and processes at school and in the community. In also considers that immigrant Canadian-born Pakistani youth living in multicultural cities including Toronto, Vancouver, and Montreal come in direct contact with other immigrant cultures in their surrounding and are exposed to other cultures through mass and social media.

1.4.2.1 How the Systems Perspective Informed my Thesis.

My thesis study is informed by my comprehensive paper for my doctoral program which was a scoping review on immigrant and refugee youth mental health (Khan et al., 2018). The scoping review identified three broad themes that influenced immigrant youths' mental health. These were: 1) the determinants of mental health; 2) coping and adaptation mechanisms youth

adopted to adjust to the host society; 3) and youths' perceptions of racism and discrimination. The themes and subthemes identified in the review helped to create a Systems Perspective Conceptual Framework (Figure 1).

Figure 1: **A Conceptual Framework: A Systems Presentation of Influences on Immigrant Youths' Mental Health**



The conceptual framework entails three levels of influences that shape the mental health of migrant youth; 1) the micro-level factors, which are the intra-personal and interpersonal factors, and included personal resources such as resilience, self-esteem, positive self-identity, higher sense of belonging, agency and self-determination, and ethnic identity, national identity, acculturative stress, coping and adaptation mechanisms, and family stability and cohesiveness; 2) meso-level factors, which are related to family and school, and included cultural connectedness, parent-child relationship problems, communication and cultural differences, intergenerational

conflict, access to external supports and youth adjustment at school; and 3) macro-level factors which included language, culture, racism and discrimination.

The scoping review also found family (family support and cohesion), school (school connectedness, providing opportunities for development) and cultural connectedness contributed to acculturation stress reduction and migrant youths' mental health protection. Among the additional findings were those related to youth anglicizing their names to fit in and treasuring their ethnic identity to cope with racism and discrimination. In Chapter seven, I compare the Systems Conceptual models from my scoping review (Figure 1) with the Systems Conceptual model developed from the qualitative arm of my thesis study (Figure 8).

1.4.3 Sensitizing Concepts and Key Terms

The definitions of important terms and key concepts utilized in the health literature and in my thesis are presented here. The term "sensitive concepts" was first introduced by Blumer (1954). Sensitizing concepts provide the background ideas that inform a research study. The concepts generated from the research participant's perspectives (such as language and expressions) are used to sensitize the researcher to gainful lines of inquiry (Bowen, 2006). Sensitizing concepts are viewed as interpretive devices (Padgett, 2004) and loosely defined conceptual tools (Marsiglio, 2004) that form the baseline concept for a qualitative study (Padgett, 2004). Sensitizing concepts are different from "definitive concepts": the latter provide prescriptions of what to see; while the former suggests ways of seeing, organizing, and understanding experiences. Sensitizing concepts are those unnoticed ideas that inform the overall research problem (Bowen, 2006). Key terms and sensitizing concepts used in this study are presented below.

Youth is recognized as a socio-psychological developmental period in the life of an individual that bridges childhood to adulthood. In this study I utilize the United Nations definition of youth as those persons between the ages 15-24 years (UNESCO, 2017; United Nations General Assembly, 2001).

Adolescence is the transitional phase of growth and development from childhood to adulthood. It is one of the most rapid phases of human development beginning at puberty. It is universally accepted that biological maturity (e.g., puberty) precedes psychosocial maturity. However, the social transitions vary with the socio-cultural environment (World Health Organization, 2019). Those in the age range of 10 to 18 years are commonly considered as adolescents (American Psychological Association, 2002; World Health Organization, 2020b). However, some development aspects of adolescence can begin earlier than age 10 and may continue past the age of 18 years in individuals (American Psychological Association, 2002)..

Emerging adulthood is a critical life phase in human development that spans from adolescence to full-fledged adulthood (age range is between 18 to mid 20's). It is a period when young persons complete their education, find employment, and establish essential social relationships (McGorry, 2019). It is also a vulnerable phase as young people's newfound freedom and peer pressure enhances the temptation to take risks, and engage in drug and alcohol use (Rosenberg, 2016). The participating youth in my study fall in this age group.

An *immigrant* is defined as a permanent resident who voluntarily migrates to Canada as a business, economic or family-class immigrant (Citizenship and Immigration, 2014). The Statistics Canada's Labour Force Survey (Yssaad & Fields, 2018) identifies three groups of immigrants based on how long they have been in Canada as landed immigrants; 1) *newcomers* or *very recent immigrants* are immigrants who have resided in Canada for 5 years or less; 2)

recent immigrants are those who have resided in Canada from 5 to10 years; and *established immigrants* are those who have resided in Canada for more than 10 years. Within the immigrant health literature several researchers (Ali, McDermott, & Gravel, 2004; McDonald & Kennedy, 2004; Dunn & Dyck, 2000) consider *recent immigrants* as landed immigrants who have spent less than 10 years in Canada, but some researchers (Fuller-Thomson, Noack, & George, 2011) consider recent immigrants as landed immigrants who have resided in Canada four years or less. Ten years is the length of time landed immigrants generally take to establish themselves in Canada and it is also the length of time after which the health of landed immigrants converges to that of native born Canadians (Dunn & Dyck, 2000; McDonald & Kennedy, 2004). Immigrants are also categorized based on the generation status and region of birth.

First generation are individuals who were not born in Canada but migrated to Canada with or without their parents (Pottie, Dahal, Georgiades, Premji, & Hassan, 2015). In this study first generation participants are defined as youth who immigrated to Canada after the age of 12 years.

The *1.5 generation* are individuals who migrated at a young age to the host country and were raised primarily in the host country and most of their primary socialisation was in the host country (Rumbaut, 1994; Shek & McEwen, 2012). Zhou (1997) defines the 1.5 generation as those who migrated to the host country between 6 and 13 years of age, while Bartley and Spooney (2008) define the 1.5 generation as those who migrated between 6 and 18 years. For the purpose of this study, the 1.5 generation is defined as those youth who migrated to Canada before 12 years of age.

Second generation immigrants are the children born to immigrants settled in the host country (Statistics Canada, 2013). In my study second generation immigrant Pakistani youth

refers to Canadian-born youth of Pakistani descent with at least one parent who was born in Pakistan and immigrated to Canada.

Mental health is a state of well-being in which an individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to their community (World Health Organization, 2014). Mental health is a multi-faceted phenomenon which includes aspects of human development such as emotional, social, moral, and cognition.

Mental illness is defined as a condition where emotional, behavioural and psychiatric problems cause distress, and significantly interfere with a person's normal functioning and social skills (Canadian Mental Health Association, 2016). Mental illnesses are broadly categorized as mood disorders (e.g., depression and anxiety), psychotic disorders (e.g., schizophrenia), and eating disorders and personality disorders (Canadian Mental Health Association, 2016).

Health Composite is a health indicator I developed for this study to measure the overall health of the participating youth. It provides one health status score for four health indicators on the health section of the survey including general health, mental health, social health, and stress levels. The *Health Composite* score is calculated as the average score for the responses on these four health measures. The *Health Composite* is discussed in more detail in the methods section.

Social locations or social identities describe the social categories assigned to groups of people or individuals, where one category of identity may have salience over another for a given time and place (Hankivsky, 2011; Veenstra, 2011). Individuals may negotiate or adopt one or more aspects of their social identity which may be more important or noticeable in a given time or context. Social identities include race, ethnicity, indigeneity, religion, gender, class, sexual orientation, age, ability, migration status, and geographic location.

Ethnic identity is the self-identification and psychological attachment of an individual to an ethnic group they closely relate to. Cultural identity is a similar concept to ethnic identity as both signify identification to unique traditions, heritage and language of a group that are passed from one generation to the next generation (Verkuyten, Wiley, Deaux, & Fleischmann, 2019).

S*elf-esteem* is a psychological construct which entails a positive or negative evaluation of the self (Rosenberg, 1965). It measures a person's overall subjective feelings of self-worth or self-valuation.

Resilience refers to the notion of positive coping despite experiences of adversities. From a psychological perspective, resilience is the ability to positively adapt with ongoing daily hassles to major life events, misfortunes, hardships and setbacks (Fletcher & Sarkar, 2013). Resilience is a strength based concept widely used in an array of disciplines and in discussions on risks and safety threats (Doorn, Gardoni, & Murphy, 2019).

1.5 Chapter Summary and Rationale for Applying Theoretical Concepts

This chapter highlights the importance of examining the mental health of immigrant and Canadian-born Pakistani youth. In this chapter, I also discussed two theoretical concepts – the Systems Perspective and the Social Determinants of Health – which informed the development of my dissertation and guided the discussion and findings of my study.

In recent years immigration and immigrant populations have been a focus of discussion in the health literature. Equitable access to health promotion, prevention, and healthcare are essential to the health of immigrants. But research has shown that immigrant health is influenced by social and economic policies, and the inequalities created as a result of those policies. (Mikkonen & Raphael, 2010; Raphael, 2017). Gaps in the public health literature relating to Social Determinants of Health and immigration have led to missed opportunities for improving

health and reducing health inequities among populations (Braveman, Egerter, & Williams, 2011). Thus, taking a broader examination of immigration as both socially determined and a social determinant of health is critical to understanding and improving immigrant health (Castañeda, et al., 2015). In my study the SDOH approach provides a broad understanding of the social effects of immigration on the health and mental health of immigrant and Canadian-born Pakistani youth. It also helps to evaluate the effects of social and economic inequalities on immigrant lives, such as unemployment, lack of affordable housing, and social exclusion.

Being a racialized or minority immigrant in Canada can limit the opportunities to better employment, higher education, adequate housing and quality health because the immigrants' race, ethnicity, age, gender, migrant status (such as refugee status), social class and economic status position them in a less favourable location in Canadian society, its institutions, and the health service sectors. In this study the Systems Perspective provides insights to the power dynamics challenging or facilitating the unique needs of youth at the micro-, meso-, and macro-levels. The approach provides an understanding of how immigrant and Canadian-born Pakistani youths' mental health is shaped in a multicultural society. It explains immigrant and Canadian-born Pakistani youths' experiences of mental health in the context of migration, and if their experiences are different from each other. The approach also considers the significance of stigma, discrimination, social exclusion, financial difficulties and acculturation, on the youths' mental health.

Chapter 2: Literature Review

In this chapter, I review the relevant literature on immigrant and Canadian-born Pakistani youths' mental health. I describe the Pakistani diaspora in Canada from early settlers to present day Pakistani communities. I also discuss the healthy immigrant effect phenomenon which has often been debated in the immigrant health literature. Next, I revisit the Social Determinants of Health and how they are linked to the mental health of immigrant youth and their families. In the sections that follow, I provide the evidence on the mental health of South Asian immigrants (as Pakistani immigrants are included as South Asians). I also discuss what we know about immigrant youths' mental health. After this, I review the literature on acculturation, a process that explains how immigrant youth modify and adapt to the dominant host society. Lastly, I discuss the role of ethnic identity, resilience, and self-esteem in the health and wellbeing of immigrant youth. The published literature on gender differences in self-esteem, resilience, ethnic identity and mental health is also discussed.

2.1 The Pakistani Diaspora

Immigrants from Pakistan are among the thousands of migrants from around the world who self-select to come to Canada for a better quality of life and expectations of a brighter future for themselves and their offspring. Pakistan ranks among the top 10 immigrant source countries for Canada (Statistics Canada, 2011a; 2011b; 2013). The 2011 National Household Survey reported 157,000 persons who self-identified as Pakistanis (Statistics Canada, 2011a). The 2016 census reported 215,560 persons who self-identified as Pakistani or of Pakistani origin (Statistics Canada, 2016). Approximately 73% of Pakistanis live in Ontario and the Greater Toronto Area (GTA) has the largest concentration of Pakistani communities (a larger majority live in Western Mississauga and East York region) (Statistics Canada, 2011a).

The earliest Pakistani migrants began to settle in North America after the end of the British rule in British-administered India and the emergence of Pakistan as an independent nation in 1947. They were mostly urban Punjabis and Muhajir-Muslims (Muslim migrants and their descendants who had left India for Pakistan after division of British India) (Mohammad-Arif, 2009). The inclination for Pakistanis to migrate to North America increased after the United Kingdom closed its doors to South Asian immigrants in 1972 (Jamil, 2014). The initial wave of Pakistani settlements in Canada took place in the 1950s when small groups of Pakistani men pursuing graduate or professional studies settled in Montreal and Toronto (Awan, 1989; Qureshi & Qureshi, 1983). They later sponsored their extended family members to join them. The arrival of immigrants from Pakistan increased after Canadian immigration rules changed in 1967 (Jamil, 2014), allowing immigrants to be selected based on job skills, language fluency, and education, rather than race or nationality (Cardozo & Pendakur, 2008; Jamil, 2014). Subsequently, the intake of immigrants shifted from European countries to a greater intake of Asian immigrants (Cardozo & Pendakur, 2008). As reported by Information Canada immigration statistics (as cited in Wood, 1978), between 1966 and 1976 about 14,942 Pakistanis settled in Canada. Pakistani-Canadian communities were formed when well-educated urban immigrant Pakistanis settled in and around Canada's major cities (Qureshi & Qureshi, 1983) after the 1976 immigration Act (which ratified immigration regulations that had already been in force for a decade) (Cardozo & Pendakur, 2008). The next wave of Pakistanis arrived in Canada from the United States of America (USA) following the September 11, 2000 terrorist attacks in the USA. Two years later, the USA introduced the Patriot Act and the National Security Entry-Exit Registration System (NSEERS) in 2002 and more Pakistani families fled to Canada (Nguyen, 2005). In the next

section I discuss the literature on the healthy immigrant effect, the observation that recent immigrants are generally healthier at the time of arrival in the host country.

2.2 The Healthy Immigrant Effect

The healthy immigrant effect (HIE) has been a much debated topic in the health literature on immigrants in Canada (McDonald & Kennedy, 2004; Ng, Wilkins, Gendron, & Berthelot, 2005; Veenstra, 2009; Wu & Schimmele, 2005), the USA (Antecol & Bedard, 2006; Jasso, Massey, Rosenzweig, & Smith), and Australia (Biddle, Kennedy, & McDonald, 2007). According to this phenomenon, recent immigrants initially enjoy better health than the host populations on some standard health measures such as self-rated health and mortality rates (Newbold, 2005a; 2005b). It is believed the initial health advantage is a result of:1) self-selection, healthier people tend to migrate (Castañeda, et al., 2015); 2) systemic-selection, recipient country ensures the immigrant pool is overall healthy (Wu & Schimmele, 2005); and 3) health nurturing characteristics some immigrants possess or bring with them to the host country such as: (i) social capital and community networks (Eschbach, Ostir, Patel, Markides, & Goodwin, 2004), (ii) coping strengths (Ali, 2002; Beiser, Hou, Hyman, & Tousignant, 2002; Laroche, 2000, Lou & Beaujot, 2005; Pottie, et al., 2015), (iii) cohesive families/family bonding (Alvarez & Helms, 2001), and (iv) fostering respect for their own cultural heritage and values in children by parents (Berry, 1997). Literature reviews on Canadian studies found the HIE was less significant in mental health, chronic health conditions, disability, and risk behaviours (Vang, Sigouin, Flenon, & Gagnon, 2015; 2017). The HIE also differed by immigrant status and gender, and over the life-course: refugees compared to family class and economic class immigrant reported poorer health (Lu & Ng, 2019); South Asian immigrant women had significantly worse self-rated health than Canadian-born women (Ganann, Sword, Black, & Carpio, 2012); and the

HIE was evident from age 20 to 65 years, but was less notable in childhood, adolescence, and later adult life (Vang et al., 2015).

As the length of residence in the host country increases the health of immigrants declines to the level of the host population (Kennedy, Kidd, McDonald, & Biddle, 2015; Newbold & Danforth, 2003). Using data from the National Population Health Survey (from 1994/5 to 2000/01) Newbold (2005) found specific groups of immigrants had a lower risk of health deterioration over time: 1) female immigrants compared to their male counterparts; and 2) younger adult immigrants (aged 20-34 years) compared to other age groups. Researchers studying the health trajectory of new immigrants' after their arrival in Canada found an increase in self-reported poor health after four years in Canada (Kim, Carrasco, Muntaner, McKenzie, & Noh, 2013). They further found the risk of poor health was greater among immigrant women of South Asian and Chinese backgrounds compared to European women and their male migrant counterparts (Kim et al., 2013; Veenstra, 2011). The health deterioration was associated with socioeconomic factors, lack of language proficiency, and perceived and real discrimination (Kim et al., 2013).

Immigrants' diminishing health (Ali J. , 2002; Beiser, Hou, Hyman, & Tousignant, 2002; Bhopal, 2011; Bourque, van der Ven, & Malla, 2011; Sanou, O'Reilly, Ngnie-Teta, & Batal, 2014; Wu & Schimmele, 2005) has also been linked to immigrants acculturating to the host society and adopting the health behaviours of the dominant culture (Leão et al., 2009; Ryder et al., 2000). For example, female migrants who had spent a greater time in the United Kingdom indulged in smoking and drinking, hence their health declined and converged to that of mainstream British population (Hawkins et al., 2008; Kornosky et al., 2008). With additional years in Canada the lifestyle of immigrants converges to native born populations. It has been

speculated that adoption of health behaviours such as smoking (Newbold , 2005), heavy drinking and physical inactivity, lead to overweight and obesity (McDonald & Kennedy, 2005) and loss of the initial immigrants' health advantage (Perez, 2002).

The findings on the HIE appear to be mixed. In some studies, it was observed that non-European immigrants reported poorer health compared to native born Canadians and European immigrants (Ng, Wilkins, Gendron, & Berthelot, 2005; De Maio & Kemp, 2010). In another Canadian study, Chinese and South Asian immigrants reported poorer health than French and Black immigrants and native born population (Kobayashi, Prus, & Lin, 2008). Contrary to these findings no differences in health between immigrants and native born Canadians was found in a study by Laroche (2000). Several explanations for the varied findings have been proposed: 1) immigrant groups may report and interpret self-rated health differently because of differences in language, culture, and understandings of health; ii) new immigrants may not report health problems because of difficulty navigating the system and barriers in access to healthcare (Ali, 2002), and thus health conditions in immigrant groups maybe underdiagnosed (Laroche, 2000); iii) and declines in socioeconomic status due to difficulty accessing the Social Determinants of Health contributing to diminishing immigrant health. Increased attention to addressing mental health issues nationally and globally has led to a better understanding of mental health and established the link between SDOH and mental health (Minas, Tsutsumi, Izutsu, Goetzke, & Thornicroft, 2015). The next section takes a closer look at the relationship between the SDOH and immigrant mental health.

2.3 Social Determinants of Mental Health among Immigrants

The migration process comprises of three phases pre-migration, migration and post-migration resettlement. Each phase is associated with specific risks and challenges. During the

pre-migration phase, prolonged exposure to poor resources in a refugee camp and experiences of trauma, and endemic violence (Kirmayer, Narasiah, Munoz, Rashid, & et, 2011) can lead to mental disorders such as post-traumatic disorders among refugee migrants (Hynie, 2018). The *post-migration* context can be a strong determinant of migrant mental health (Hynie, 2018). Initially, resettlement brings hope and optimism. Later, disproportionate exposure to health lowering Social Determinants of Health including racism and ethnic discrimination (Commission on Social Determinants of Health, 2008; World Health Organization and Calouste Gulbenkian Foundation, 2014) as a result of exclusionary policies and structural barriers (Benoit, Westfall, Treloar, Phillips, & Jansson, 2007; Hynie, 2018; Khanlou & Jackson, 2010; Mikkonen & Raphael, 2010) their living and working conditions are affected (Raphael et al., 2020) and ultimaletly their health and wellbeing declines. Moreover, when aspirations are not realized migrants may feel disillusioned, demoralized and become depressed (Kirmayer, Narasiah, Munoz, Rashid, & et, 2011).

In the post-migration context, acculturation stress and economic uncertainty further impact immigrant mental health (George, Thomson, Chaze, & Guruge, 2015). Recent immigrants compared to native born residents are three times more likely to live in a low-income family (Mikkonen & Raphael, 2010). Youth of immigrant parentage experience more poverty, and mental health problems compared to youth of native-born parents (Tienda & Haskins, 2011). Prolonged periods of social and economic deprivation can result in the development of maladaptive coping behaviours (Borjas, 2011). Poverty experienced during childhood can lead to: 1) lower educational achievements; 2) lower earnings in the labour market (Borjas, 2011); and 3) chronic health and mental health conditions in adult life (Commission on Social Determinants of Health, 2008; Davey Smith, Gunnell, & Ben-Shlomo, 2000). Beiser et al.

(2011) found disorganized neighborhoods, poor home-school relationships, and marginalization contributed to the poor mental health of immigrant children in Toronto. Evidence shows that assurance of employment and economic stability can mitigate migration stress and promote good health outcomes in immigrants (George, Thomson, Chaze, & Guruge, 2015).

In the next section, I review the literature on the mental health of immigrants in multicultural societies. As the literature on the mental health of immigrant Pakistani youth in Canada is under-developed, I discuss the mental health issues identified among South Asian populations in Canada, USA, United Kingdom and Europe.

2.4 Mental Health and Illness among Immigrant South Asians

Most immigrants usually become a part of the host system by adapting to the host culture (Virupaksha, Kumar, & Nirmala, 2014). While an exciting period, the immigration process is believed to be a stressful experience for many immigrants and is influenced by personal, social and cultural factors. The migration process varies from one migrant (or migrant group) to another (Bhugra, et al., 2011; Cobb, Xie, Meca, & Schwartz, 2017). Exposure to prolonged stress can negatively affect a person's mental health. A review on access to mental health services for immigrants in the United States found cultural beliefs, religion, and language barriers affected how mental illness was expressed, presented, diagnosed, and treated (Bhugra, et al., 2011). In Canada, Lou and Beaujot (2005) found immigrant populations compared to Canadian-born residents were less likely to seek help for mental health. They used fewer mental health resources over their life course and received less social support.

The South Asian population is the largest visible minority group in Canada (Statistics Canada, 2016). They are substantially ethno-culturally diverse (Ghosh, 2013) with group members originating from India, *Pakistan*, Sri Lanka, Bangladesh (Statistics Canada, 2008), Fiji

Islands, South Africa, East Africa, Guyana, Trinidad, the Middle East, and England (Awan, 1989; Coward, 2017). Several mental health issues among the South Asian populations in Canada (Ahmed, et al., 2005; Lai & Surood, 2008) and United Kingdom have been identified (Anand & Cochrane, 2005; Ineichen, 2008). A higher prevalence of major depression, higher unmet needs and a low uptake of mental health services amongst adult South Asian populations in the United Kingdom relative to mainstream populations has been noted (Gater, et al., 2009; Husain, Creed, & Tomenson, 1997; Weich, et al., 2004). Similar results were reported by Canadian researchers; South Asians Canadians had higher rates of depression but used fewer mental healthcare services compared to native-born Caucasian Canadian residents (Lai & Surood, 2008). Moreover, a smaller proportion of South Asians in the United Kingdom (Commander, Odell, Surtees, & Sashidharan, 2004; Mooney, Trivedi, & Sharma, 2016), and Canada (Islam, 2012), received a psychiatric diagnosis, a psychiatric referral, or engaged in treatment for depression compared to the mainstream population. These differences have been linked to perceptions about mental health. For example, Islam (2012) found that mental health was a highly stigmatized and silenced issue in South Asian communities in Canada. Other explanations for reduced use of mental healthcare were cultural exclusion and racial discrimination experienced by South Asian patients throughout the range of psychiatric healthcare services in Europe and the United States (Gary, 2005; Ikram, et al., 2015; Williams & Mohammed, 2009). Jibeena and Khalid (2010) found poor mental health in adult Pakistani immigrants in the Greater Toronto Area (GTA) was linked to higher acculturative stress, fewer coping resources, lower income, and being employed in a job not relevant to their qualifications.

Health differences among South Asian ethnic groups have been reported in a study examining self-rated health among British South Asians and the British Caucasian populations.

The researchers found differences in self-rated health by ethnicity; compared to Caucasian (*n* = 2860) participants, Pakistani and Bangladeshi respondents (*n* =1771) had the poorest self-rated health. East Indians (*n* =1268) reported somewhat better health than Pakistani and Bangladeshi respondents (Chandola, 2001).

2.5 Youth and Mental Health

Mental health influences all aspects of development and functioning of young persons, including their performance at school and academic achievements (Suhrcke & de Paz Nieves , 2011) and family and peer relationships (Auerbach, Bigda-Peyton, Eberhart, Webb, & Ho, 2011). Good mental health is essential for optimal emotional, behavioural, social and cognitive development in children and youth. Supportive environments and stable relationships can promote young people's mental health (Waddell, McEwan, Hua, & Shephard, 2002). Young developing brains are particularly sensitive to stress and negative environmental experiences and this coincides with increased risk-taking during this period (Taber-Thomas & Pérez-Edgar, 2015). Most mental disorders emerge during adolescence and often persist thereby reducing functioning and productivity in adult life (McGorry, 2019; National Research Council and Institute of Medicine, 2009; Waddell, McEwan, Hua, & Shephard, 2002).

Mental disorders affect a large number of children and youth around the world (Mokdad, et al., 2016; Patton, et al., 2016) and the WHO Burden of Disease Study Report refers to them as "the chronic diseases of the young" in (Demyttenaere, et al., 2004). According to the World Health Organization (2017) about 10-20% children and youth between 10 and 24 years are affected by mental illness. One in five children and adolescents in Ontario, Canada reported having a mental health problem at some point in time (MHASEF Research Team, 2015;

Smetanin, et al., 2011). Common mental disorders in youth include anxiety, depression, psychosis, substance abuse disorders and eating disorders (Blakemore, 2019).

Empirical studies have implicated an association between smart phone use and social media with mental health problems, but results have been mixed (Rosen, Whaling, Rab, Carrier, & Cheever, 2013). Studies suggest that increased exposure to social media could possibly increase depression, (Lin , et al., 2016; O'Keeffe & Clarke-Pearson, 2011), mental distress, and promote self-harm behaviour and suicidality among youth (Abi-Jaoude, Naylor, & Pignatiello, 2020). Social networking has become the most popular activity among young people today (Rideout, Foehr, & Roberts, 2010). Almost three out of every four youth uses some form of social networking (Lenhart, Purcell, Smith, & Zickuhr, 2010). In Ontario, Canada, proportion of teenagers who spend five or more hours on social media on a daily basis has increased from 11% in 2013 to 20% in 2017 (Boak, Hamilton , Adlaf , Henderson, & Mann, 2018). In the next section I discuss the specific mental health issues pertaining to immigrant youth.

2.6 Immigrant Youth and Mental Health

On resettlement immigrant youth experience rapid changes in their environment. These may include adapting to a new culture, learning a second language, and a decline in socio-economic status (Anisef & Kilbride, 2000; Phinney, Berry, Vedder, & Liebkind, 2006; Sirin, Sin, Clingain, & Rogers-Sirin, 2019). The mental health of immigrant youth is shaped by their subjective experiences, their family's wellbeing, and their socioeconomic environment (Anisef & Kilbride, 2000; Fazel, Reed, Panter-Brick, & Stein , 2012). In post-migration settings, when culturally and linguistically diverse migrant youth are faced with adverse conditions but possess high levels of resilience, they can still show promise of good mental health and wellbeing (Pickern, 2014).

Using data from the Toronto Study of Intact Families, Montazer & Wheaton (2011) demonstrated that young immigrants (9-16 years) from countries with lower Gross National Product (GNP) have to make mental health adjustments after arrival in Canada. The study also found a decline in immigrant children's and adolescents' health trajectory: initially they had a mental health advantage, but over time their mental health became worse than their native-born peers. Fundamentally, adaptation and adjustment processes - such as greater cultural distance to bridge, and uncertainty and discrimination - affected their mental health, (Montazer & Wheaton, 2011). The adjustment related mental health issues were linked to increased family conflict and decreased parental school involvement (Montazer & Wheaton, 2011; Pernice & Brook, 1996). Since Pakistan belongs to the list of countries that have a lower Gross National Product, immigrant Pakistani youth born or raised in Pakistan may exhibit greater adjustment problems as reported in the literature.

2.6.1 Gender Differences in Mental Health

The World Health Organization (2020c) has identified gender as an important determinant of mental health and mental illness. The study of gender differences can help to understand mental health patterns in the population, to identify vulnerable populations, and strategize on promoting mental health (Afifi, 2007). Differences in the rates of anxiety and depression, self-reported emotional health, and self-reported stress and self-esteem have been reported among males and females (Denton, Prus, & Walters, 2004; Hopcroft & Bradley, 2007; World Health Organization, 2020c). The prevalence rate of depression has been found to be two times higher in females than males (Denton, et al., 2004; Ferrari, et al., 2013; Galambos, Barker, & Krahn, 2006; Van de Velde, Bracke, & Levecque, 2010). A systematic review on the global prevalence of major depressive disorders noted the rates of depression was 5.8 % in females, and 3.5% in

males (Ferrari, et al., 2013). In a similar vein, Bromet et al. (2011) found the average female: male ratio of major depression to be 2:1.

Gender differences in mental health vary across the life stage (Blakemore, 2019; Patten, et al., 2016; Salk, Hyde, & Abramson, 2017). Differences are most notable during adolescence when more females report depression than males (Blakemore, 2019). The gender difference persist to adulthood until age 55 years when depression rates become equal for men and women (Blakemore, 2019; Salk, Hyde, & Abramson, 2017). In late adulthood the pattern reverses when more men compared to women become depressed (Girgus & Yang, 2015). A review of two meta-analyses studying gender differences in symptoms and diagnosis of depression across the life-course from 90 nations found similar results (Salk, Hyde, & Abramson, 2017). Gender differences in symptoms and diagnosis of depression first emerged at age 12 and were most significant between 13 to 16 years (Salk et al., 2017). These findings support Girgus and Yang's (2015) results on gender differences in mental health across the life stages. Furthermore, gender differences were consistent across all ethnic groups, in particular, in expression of *depression symptoms* (Salk et al., 2017). Hopcroft and Bradley (2007) noted gender differences in rate of depression across 29 nations. Higher rates of mental health problems in female immigrants compared to male immigrants were also noted in the Longitudinal Survey of Immigrants to Canada (Robert & Gilkinson, 2012).

Several possible explanations have been suggested for gender differences in mental health. Genetic, hormonal, anatomical, physiological differences and variations in psychosocial traits exacerbated by the social determinants (e.g., symptom reporting behaviour and coping) produce differential health risks between males and females (Afifi, 2007; Hopcroft & Bradley, 2007; Kuehner, 2003). Poorer mental health (such as greater anxiety and depression) reported in

females may be related to stressful life events (Denton, et al., 2004), less socioeconomic resources and more unemployment (Artazcoz, Benach, Borrell, & Cortes, 2004), poverty (Belle & Doucet, 2003), violence (Koss, et al., 1994), and gender inequality (Salk, Hyde, & Abramson, 2017). A study examining trajectories of depressive symptoms and self-esteem in a sample of 920 emerging adults between 18-25 years observed similar trends for both genders; longer periods of staying unemployed was associated with higher depression rates (Galambos, et al., 2006). They also found family-related factors protected against mental health risks and depression (Galambos, et al., 2006). Other researchers (Panchanga, Dowdy, Kimbrob, & Gormanba, 2016) report social supports and networks moderate the relationship between gender and depression and increase psychological well-being. A study by Martínez-Hernáez et al. (Martínez-Hernáez, Carceller-Maicas, DiGiacomo, & Ariste, 2016) with a sample of 105 youth (17–21 years of age) with depression demonstrated gendered differences in distress management using social supports to mitigate depressive symptoms. Male youth used social networks *to control* their emotional distress while female youth used social networks as a source to talk about (*to release*) their emotional distress.

2.7 Acculturation Process and Variants

In the last two decades rapid rise in immigration from non-European countries has mobilized Western immigrant receiving societies to increase their policy focus on immigrant integration and immigrant mental health (Khanlou & Gonsalves, 2011; Mohammad-Arif, 2009; Robert & Gilkinson, 2012; Schmidt, Young, & Mandzuk, 2010). Immigrant populations now constitute larger segments of the population in immigrant receiving countries than they did before (Mesquita, De Leersnyder, & Jas, 2017). The 2016 Canadian census found that one in five persons in Canada (21.9 %) was foreign-born (Statistics Canada, 2017). Resettlement is

achieved by successful adaptations of both newcomers and the society that they settle into. This includes re-establishing a new home, rebuilding social life, establishing new networks, and recreating a feeling of belonging and self-worth in their new social environment. Acculturation is a two-way process through which both immigrants and the host society are changed by their interactions. It involves a cultural adjustment or an ultimate change (such as change in attitudes, behaviours and values) when immigrants' heritage culture interacts with the host (the majority) culture, its people and social system over a prolonged period (Wilson & Thayer, 2018). Acculturation can also be described as cultural socialization to mainstream culture through learning and adaptation (Romero & Piña-Watson, 2017). Whereas, acculturative stress refers to the stressors associated with the acculturation process (Romero & Piña-Watson, 2017). This stress can be more severe and lifelong when there is greater dissimilarity between the new migrants' heritage culture and host society (Berry, Phinney, Sam, & Vedder, 2006; Gil, Vega, & Dimas, 1994).

The concept of acculturation originated from the field of Anthropology (Boas, 1888), as cited by Alexander Lesser (Lesser, 2004). Initially it was utilized to understand the cultural and linguistic changes that occurred when two groups whose language and culture differed came into contact with each other (Rudmin, 2003). Later, psychologists adopted and re-conceptualized *acculturation* to focus on the individual's cultural experiences, and changes in identity. In the field of psychology, Berry's model of acculturation (1997) is the most widely known conceptualization of individual acculturation. Berry's model identifies four modes of acculturation: 1) *integration* (an individual retains their heritage culture, and also gains cultural competency of the mainstream culture); 2) *unidimensional mode of assimilation* (the development of a new identity - an individual completely adopts the cultural norms and social

values of the dominant society and rejects one's ethnocultural heritage); 3) *separation* (an individual strongly identifies with their heritage culture and does not identify nor participate with host culture activities); and 4) *marginalization* (an individual does not identify with their heritage cultural, nor with the host society). The *integration mode* of acculturation is the most successful according to Berry's model; in this mode individuals continue to gather social support from their original culture and also learn how to use the assets of the newly acquired culture (Walters, Phythian, & Anisef, 2007). An international study with a sample of 5,000 acculturating adolescents from 13 countries found that *integration acculturation* was positively associated with better psychological and sociocultural adjustment (Berry et al., 2006). A meta-analysis on acculturation found high acculturation was associated with less stress and less depression (Nguyen & Benet-Martínez, 2013). In *assimilation* acculturation there is loss of cultural, religious, and ethnic identity. The pressure to *assimilate* in the dominant culture can increase stress, anxiety and depression, cultural conflict, cultural distance and alienation (Bhugra, 2003). As immigrant youth navigate everyday between their heritage culture and mainstream culture their mental health is affected (Mesquita et al., 2017).

Recently acculturation has become more complex and multifaceted where multiple cultural groups co-exist and individuals are in contact with multiple cultures, particularly in gateway cities such as London, Toronto, and New York. Acculturation takes place through multiple group contact in such settings (Berry, 2018). Moreover, due to increased international and domestic telecommunications, increased travel, and internet connectivity, acculturation may not necessarily require direct continuous contact (Berry, 2017; 2018).

Immigrant children and adolescents are *encultured* within two or more cultures. *Enculturation* is defined as the process through which children and youth acquire an ethnic

identity (Paterson & Hakim-Larson, 2012), and are socialized into the beliefs, values and behaviours of their heritage culture and their ethnic group (Yoon, Langrehr, & Ong, 2011). People can hold *bicultural identity* (Nguyen & Benet-Martínez, 2013) or multiple social identities that are reflective of their membership in two or more different groups determined by their domains of life or level of abstraction (Verkuyten, et al., 2019). Bicultural individuals are competent in navigating both their heritage culture and the immigrant receiving culture, and therefore garner greater benefits in all areas of life (Berry, 1997; Berry, et al., 2006).

2.7.1 Factors that Moderate Acculturation

The integration of immigrants into their receiving society is influenced by a host of factors (Berry, et al., 2006; Schwartz, et al., 2010) including: 1) *individual factors* such as age, gender, language proficiency, education, and social capital; 2) *contextual factors* such as national policies and societal attitude towards migrants, experiences of discrimination, and similarity of the host and immigrant cultures (Berry, et al., 2006; Schwartz, et al., 2010; Umaña-Taylor, Yazedjian, & Bamaca-Gomez, 2004); and 3) *Migration related factors* such as age of migration/arrival of immigrant to host country, migration status, length of residence in host country, and differences in nativity or birth (Berry, et al., 2006; Nguyen & Benet-Martínez, 2013; Schwartz, et al., 2010). Limited access to economic and social opportunities in immigrant receiving societies, as a result of policies not focussed on fostering integration, leads to poor integration of immigrants (Abalı, 2009; Aparicio, 2007) and increased risk of worsened health (Gimeno-Feliu, et al., 2017; Ryder, et al., 2000). Age at migration is an important factor in integration of immigrants. Individuals who migrate before age of 12 years (1.5 generation) compared to those who migrate at a later age integrate at a faster pace in academic performance, career achievement, and acquiring economic stability (Rumbaut, 1994; 2012). The 1.5 generation

successfully adapts to both their heritage culture and dominant societal demands (Leão, Sundquist, Johansson, & Sundquist, 2009; Ryder, Alden, & Paulhus, 2000). Migrants can be successfully integrated by leveraging their upwards social mobility through: 1) tapping into their personal resources including social capital, personal endowments, or proficiency in the host language; and 2) providing them access (and supports) to opportunities for education and career success (Portes & Rumbaut, 2001).

2.8 Ethnic Identity, Self-Esteem and Resilience in Youth

The literature shows that higher levels of self-esteem, ethnic identity, and resilience promote mental health, whereas low levels of these constructs can increase vulnerability to mental illness, particularly depression. In the following sections I review the literature on ethnic identity, self-esteem, and resilience as well as their connection to mental health. I also explore the literature on gender differences on these psychological constructs. The findings from these sections contribute to my research hypothesis for the quantitative arm of my study.

2.8.1 Ethnic Identity

An important developmental milestone for immigrant youth is the construction of ethnic identity and racial identity (Rivas-Drake, et al., 2014). Ethnic and racial identification are the act of associating, committing or attaching with others of a similar ethnic/racial group and relying on them for social support (Tajfel & Turner, 1986). Ethnic identity provides youth a sense of certainty and allows them to embrace the beliefs and demonstrate the values that characterize their ethnicity (Hogg, 2001). Stronger ethnic identification protects ethnic minority adolescents against depression and anxiety (Anderson & Mayes, 2010; Chao & Otsuki-Clutter, 2011; Phinney & Devich-Navarro, 1997; Rivas-Drake, et al., 2014; Williams, et al., 2005). According

to Phinney (1992), first ethnic identity is achieved which then leads to ethnic identity affirmation or commitment to one's ethnicity (Phinney, 1992).

Juang and Syed (2010) examined ethnic identity among 225 undergraduate university students in the USA. They found ethnic minority students (in particular Latinx[2], Asian-American, and those of mixed-ethnicity) had higher levels of ethnic identity compared to Caucasian students. A review study found that strong ethnic–racial identity shaped by parental ethnic–racial socialization practices contributed positively to mental health, social health, and academic success in immigrant youth (Huguley, Wang, Vasquez, & Guo, 2019). Dupper et al. (2015) found the opposite, they observed that strong feelings of ethnic identity among ethnic and racialized youth were inversely associated to academic achievements in the USA. Thus, moving away from strong ethnic identification or adopting a "raceless" identity facilitated immigrant youth to successfully navigate the educational system (Contrada, et al., 2000). Markstrom et al. (2011) and Rivas-Drake et al. (2014) who examined ethnic identity among Latinxs and American Indian youth found inconclusive results, a link between ethnic identity and youth wellbeing was not established.

2.8.1.1 Gender and Ethnic Identity

There is a general believe that women are the primary carriers of cultural traditions and values among ethnic minorities (Hughes, et al., 2012). A significant effect of gender on ethnic identity for African-American and Asian-American respondents was found in a study with 12,386 participating American adolescents; females scored higher on ethnic identity than male adolescents (Martinez & Dukes, 1997). Similarly, a study examining 150 male and female

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[2] Latinx refers to a person of Latin American origin and is used as a gender-neutral/nonbinary alternative to Latino or Latina. Its plural is Latinx

African American, Asian American, Latinx American, and Caucasian American college students found female students had significantly higher scores in ethnic identity than their male counterparts (Chae, 2000). Hughes et al. (Hughes, Hagelskamp, Way, & Foust, 2009) found ethnic identity development differed across males and females. In a sample of 170 Chinese Puerto Rican, Dominican, and Black adolescent boys and girls, the researchers found that ethnic socialization was linked with ethnic identification more strongly for females compared to males. Juang and Syed (2010) report similar findings among immigrant American youth.

An earlier study by Phinney and Alipuria (1990) yielded minimal differences in ethnic identity across gender when they examined the psychological construct among 196 urban college students belonging to four American ethnic groups namely Asian, Black, Latinx, and Caucasian. Bombay et al. (Bombay, Matheson, & Anisman, 2010) examined specific dimensions of ethnic identity in relation to depression and discrimination, among 165 First Nations adults in Canada (of these 75 participants were between 18 and 30 years). Findings showed that ethnic identity was protective against perceived discrimination for males but not for females. These findings suggest that higher ethnic identification was more influential (advantageous) for ethnic minority males in coping with threats to their wellbeing (Bombay et al., 2010). Despite some inconsistencies in findings in the anticipated direction for gender differences in ethnic identity, females appear to score higher on ethnic identity than males.

2.8.2 Self-Esteem

Self-esteem is a psychological construct which measures a person's overall subjective feelings of self-worth (Rosenberg, 1965). Adolescents' self-esteem is particularly susceptible to internal and external influences (Erol & Orth, 2011). The literature shows mixed findings concerning self-esteem levels among ethnic minority youth. Khanlou (2004a) examined the

global and current self-esteem levels in 550 grades 9–13 students from diverse cultural background including immigrants and children of immigrants living in Hamilton, Ontario Canada. The study found more than one third (27.6%) of students scored very high global self-esteem score. A cross-sectional study using data from 326,641 diverse ethnic individuals (including Black-Americans, Latinx, Middle Easterners, Asians and Caucasians) between 9-90 years, found self-esteem level was highest among Black-Americans and lowest among Caucasians persons (Robins, Trzesniewski, Tracy, Goslin, & Potter, 2002). Smokowski and colleagues (Smokowski, Evans, Cotter, & Webber, 2014) however, found the opposite. In a sample of 4,714 participants, European American youth reported higher self-esteem compared to West Indian and Hispanic youth. Similar results were obtained by Markstrom and colleagues (Markstrom, Whitesell, & Galliher, 2011) who found Caucasian youth reported higher levels of self-esteem than American Indian youth.

The literature suggests higher self-esteem is linked to a range of outcomes of wellbeing including mental health (subjective wellbeing, and happiness), healthier life style, academic achievements, career success, psychosocial adjustment, and better interaction with social environment and coping (Baumeister, Campbell, Krueger, & Vohs, 2003; Zeigler-Hill, 2011). Findings from the Health Behaviour of School-Aged Children (HBSC) Study showed that Canadian youth with higher self-esteem were more likely to be happier and healthier, have a good relationship with their parents and peers, and to be better adjusted at school (King, Boyce, & King, 1999). Higher self-esteem also protected youth against risks and stressful life situations.

In contrast, low self-esteem is linked to a variety of mental disorders (Boden, Fergusson, & Horwood, 2008; Bos, Huijding, Muris, Vogel, & Biesheuvel, 2010) such as depression (Orth, Robins, & Roberts, 2008; Orth, Robins, Widaman, & Conger, 2014), anxiety (Henning, Turk,

Mennin, Fresco, & Heimberg, 2007), and eating disorders (Kuğu, Akyüz, Doğan, Ersan, & Izgiç, 2006). Moksnes and Espnes (2012) surveyed 1209, adolescents 13–18 years of age in Norway. They found low self-esteem was related with depression and anxiety in the adolescent. A cross-sectional study with grade 6-12 African American and Latinxs students found female students with low scores on self-esteem had a two-fold higher chances of developing depression than females with higher self-esteem scores (Conner, Poyrazli, Ferrer-Wreder, & Grahame, 2004). In a sample of 2,403 diverse 15-21 years old youths (Caucasian, Hispanic, Asian-American, Black and other ethnicity), Orth et al. (2008) found low self-esteem served as a risk factor of depression. Results from an analysis of longitudinal survey data from 674 Mexican-origin adolescents between 10 and 12 years (born either in the United States or Mexico), further established low self-esteem as a risk factor for depression (Orth et al., 2014).

Research has consistently demonstrated the connection between self-esteem and measures of wellbeing including ethnic identity, perceived racial discrimination, and resilience. Alvarez and Helms (2001) and Iwamoto and Liu (2010) found higher self-esteem among Asian American and Asian international college and university students was positively linked to racial and ethnic identity. Self-esteem also mediated the relationship between ethnic identity and mental disorders such as anxiety, and depression among American Indian and Hispanic youth (Smokowski, et al., 2014; Schwartz, Zamboanga, & Jarvis, 2007).

2.8.2.1 Gender and Self-Esteem

Research points to gender differences in self-esteem (Denton, et al., 2004). Adolescent males report higher levels of self-esteem compared to adolescent females (Derdikman-Eiron, et al., 2011; Khanlou, 2004b; Moksnes & Espnes, 2012). Using survey data from 9th- to 12th-graders from the Texas Youth and Family Project (37.9% of respondents were Latinx youth),

Bean and Northrup (2009) found boys scored higher on self-esteem than girls. A study from Hamilton, Ontario on students' global and current self-esteem reported similar findings (Khanlou, 2004a). A longitudinal study with a sample of 219 Swiss youth 12 to 14 years showed girls had poorer self-esteem than boys (Bolognini, Plancherel, Bettschart, & Halfon, 1996).

Several individual, family and environmental factors for the variance in self-esteem have been suggested including age, gender, ethnic identity, academic and social acceptance (Gentile, et al., 2009). Robin et al (2002) examined self-esteem across the life course using survey data from 326,641 individuals aged 9-90 years. The study results showed self-esteem was identical for both girls and boys between 9 and 12 years. After 12 years (during adolescence) self-esteem levels dropped for both girls and boys but they were much lower for girls than boys. The gender gap with females scoring lower on self-esteem continues throughout adulthood (Robins, et al., 2002). Galambos and colleagues (2006) used a school-based community sample of 920 emerging adults 18-25 years to conduct a longitudinal study in Canada. The study results showed that over time the gender gap for self-esteem and depressive symptoms narrowed. Self-esteem increased and depressive symptoms declined in the youth.

2.8.3 Resilience

Resilience is a strength-based concept that explains why some individuals are able to better cope with stress and challenging circumstances while others in similar circumstances are not (Masten, 2001; 2015). Resilience is the process whereby the biological, psychological, social, and environmental systems interact to help individuals to regain, sustain, or improve their mental wellbeing (Ungar & Theron, 2020). Resilience building in early in life (in children and youth) is associated with lifelong benefits including the promotion and maintenance of good mental health (Centre for Addiction and Mental Health, 2012; Hartley, 2011), improved

academic outcomes (Hartley, 2011; Wu, Tsang, & Ming , 2014), career achievements, improved social outcomes and reduced socioeconomic inequalities (Khanlou & Wray, 2014).

Our current understanding of resilience have led to greater attention to research addressing psychological and sociological problems in children and youth (Pickern, 2014). Factors which enable resilience in youth, and thereby protect them from adversities, can be grouped as: 1) individual characteristics, such as self-esteem, and social competence (Hosseini, 2015); 2) family characteristics (Barankin & Khanlou, 2007), such as family cohesiveness (Greeff & Holtzkamp, 2007) and absence of discord, and positive relationship with parents or relatives (Wu, Tsang, & Ming , 2014); and 3) social or community support systems that encourage and reinforce a child's coping efforts (Dolan & McGrath, 2006). Cultural factors, such as cultural orientation, racial and ethnic identity (Miller & MacIntosh, 1999) help immigrant, refugee and racialized minority youth to develop resilience against racism and discrimination, thereby protecting and promoting their wellbeing (Neblett Jr, Rivas-Drake, & Umaña-Taylor, 2012). Education is a key strategy used by immigrant, and minority youth to remove barriers in achieving their career aspirations and to cope with everyday environmental threats. It protects them against racism (Krahn & Taylor, 2005), discrimination, and social injustice (Harris-Britt, Valrie, Kurtz-Costes, & Rowley, 2007).

2.8.3.1 Gender and Resilience

Boys/men differ from girls/women on their experiences of adversity and response to stressful life events (Hirani, Lasiuk, & Hegadoren, 2016). Females more often report stress than males (Matud, 2004). They have higher rates of exposure to certain stressful events, such as gender based violence (World Health Organization, 2013), an increased vulnerability to stress (Donner & Lowry, 2013) and increased vulnerability to develop mental disorders to those

stressors (Fuller-Thomson, Filippelli, & Lue-Crisostomo, 2013; Sweeney, Air, Zannettino, Shah, & Galletly, 2015).

Two years after an earthquake in Italy adolescent males exposed to the natural adversity reported consistently higher resilience scores compared to adolescent females (Stratta, et al., 2013). It is suggested that males and females depend on different protective mechanisms to maintain resilience. Males have been found to adopt problem-focused coping strategies whereas females adopt emotion-focused coping strategies (Matud, 2004; Stratta, et al., 2013). Habib and colleagues found that greater participation in extracurricular activities promoted resilience more strongly for males than for females among middle school children exposed to adversaries (Habib, Zimmerman, & Ostaszewski, 2014). The school environment offers both risks (stressful events) and protective factors; how students balance these factors determines whether they will be successful (be resilient) or succumb to the challenges and become depressed and develop anxiety or psychopathology (Samplin, Ikuta, Malhotra, Szeszko, & Derosse, 2013). On analysis of survey data from high schools in the USA, with a sample of Caucasian, Latinx, Asian, and African American youth, it was found that females used social supports for stress reduction and academic achievements and positive relationships with teachers to protect themselves from academic adversity (Crosnoe, Erickson, & Dornbusch, 2002). A study examining resilience in youth transitioning from middle school to high school in Canada did not find gender differences in resilience scores (Saverimuthu, 2015).

2.9 Chapter Summary and Study Rationale

This section summarizes the literature review findings and presents the rationale of my study. The discussion on Pakistani diaspora found that immigration from Pakistan increased after Canadian immigration laws in 1967 opened doors to non-European immigrants. More than three-

fourths of the Pakistani population in Canada reside in the GTA. The review on the healthy immigrant phenomenon identified three factors (self-selection, systemic selection and individual characteristic) that accounted for the health advantage recent immigrants enjoyed. However, with increased stay in the host country, immigrant health diminishes because of health inequities, socioeconomic factors, real and perceived discrimination, and adoption of health damaging behaviours. Since the literature on the mental health of immigrant Pakistani populations is scarce, the broader literature on South Asian immigrant populations was used to consider Pakistani immigrants. Findings showed that relative to mainstream populations, South Asians immigrants have higher prevalence of major depression, lower uptake of mental health services, experience more stigma, cultural exclusion and racial discrimination. The review on acculturation illustrated that the acculturation process is associated with acculturation stress, the pressure to adapt or adjust to mainstream culture. Acculturation stress can contribute to poor mental health in immigrant youth. The literature review identified individual, and contextual factors related to migration influence ethnic identity, self-esteem and resilience in immigrant youth. The barriers, facilitators, and enablers of these attributes were also identified. Findings from the literature review informed the development of my research hypotheses and research questions, discussed further below.

The literature review revealed that existing Canadian research on immigrant mental health has focussed on the adult South Asian immigrant population in Canada (Ahmed, et al., 2005; Islam, Khanlou, & Tamim, 2014; Mehta, 1998; Surood & Lai, 2010; Tiwari & Wang, 2008), some adult Pakistani Canadian immigrant population (Khan & Watson, 2005; Jibeena & Khalid, 2010), South East Asian migrant youth (Hilario et al., 2014; Hyman, Vu, & Beiser, 2000; Rousseau, Drapeau, & Platt, 2004), and newcomer youth in general (Khanlou & Crawford,

2006). Research on Pakistani immigrant youth has been undertaken in the United Kingdom, Denmark and the USA; For example Shah et al., (2010) examined identity and belonging in British Pakistani youth, and Rytter (2010) and (Ghaffar-Kucher, 2014) explored the socialization and academic engagement of Pakistani youth in Denmark and the USA respectively. But research on the mental health of immigrant Pakistani youths in Canada has largely been absent. To the best of my knowledge, this dissertation is the first community-based study using a mixed methods research design to examine immigrant and Canadian-born Pakistani youths' mental health in Canada. Pakistani immigrant youth are often situated collectively within the South Asian immigrant health literature which does not reveal the hidden health differences or health risks of Pakistanis from other South Asian groups (one ethnic group from the other ethnic groups). South Asians immigrants are not a homogenous group, they differ in language, religion, region, socioeconomic status, and cultural practices. Research from the United Kingdom has reported disparities in health (Chandola, 2001) and health behaviour (Fischbacher, Hunt, & Alexander, 2004) among South Asian ethnic minority groups. A "one size fits all approach" cannot expose the ethnic differences in health, and mental health.

The purpose of my study was to examine different aspects of mental health in a sample of immigrant and Canadian-born Pakistani youth and to gather the youths' perspectives on mental health. The objectives of my study were:

1) To explore the perspectives and experiences of immigrant and Canadian-born Pakistani youth in Canada regarding mental health;

2) To explore immigrant Pakistani parents' understanding of youths' mental health; and

3) To examine the factors that influence the mental health, self-esteem, resilience and ethnic identity of immigrant and Canadian-born Pakistani youth.

It is anticipated that the findings gathered from this study will inform our knowledge on immigrant Pakistani youths' mental health status, provide an understanding of their beliefs regarding mental health, and identify the factors that enhance their mental health and treatment seeking behaviours.

Chapter 3: Research Methods

In this chapter, first I provide an overview of the mixed methods design utilized in my study. Next, I introduce the quantitative, qualitative and mixed methods research questions. Further along I describe the research methods of the quantitative arm of the study which consist of sampling, data collection, and data analysis. The last section of this chapter describes the research methods of the qualitative arm of the study including sampling, procedure, data analysis, and rigor and trustworthiness.

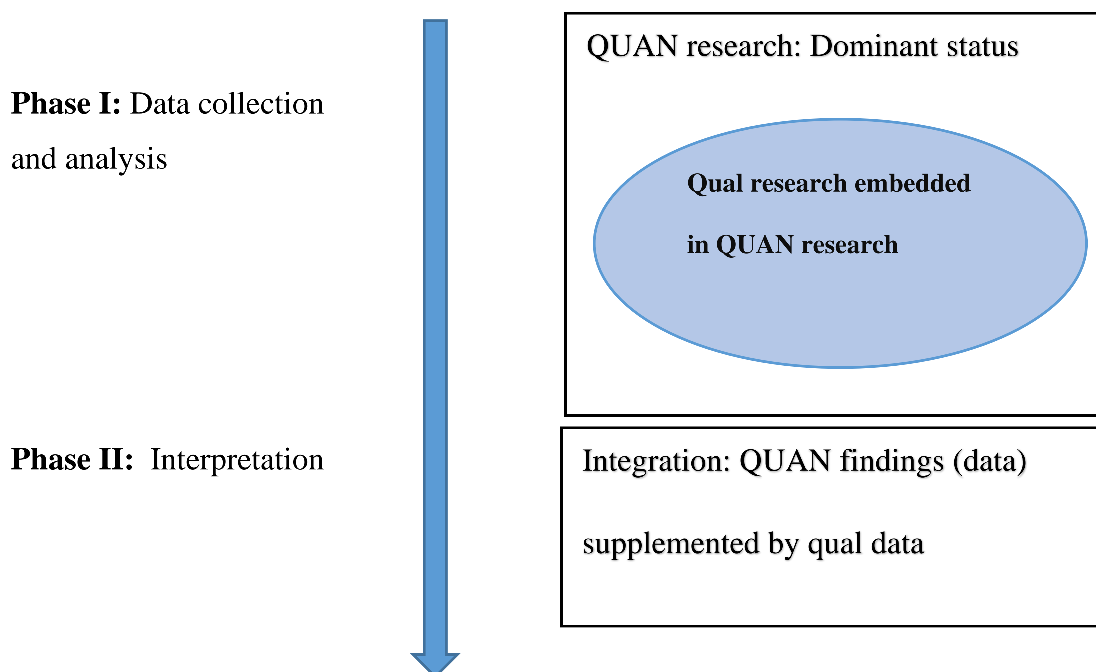
3.1 Mixed Methods: Design Overview

In mixed methods research, an investigator can examine a phenomenon in a single study by using both qualitative and quantitative methods and integrating or merging results from each method (Teddlie & Tashakkori, 2006). The benefits of this approach are that it eliminates the biases of each method and provides a better understanding of the phenomenon than either method alone could have done (Plano Clark & Ivankova, 2016). Multiple means of data collection (such as surveys, individual interviews, and focus groups) to respond to a research problem can be utilized (Weine, Durrani, & Polutnik, 2014). I utilized a concurrent embedded (or nested) mixed methods research design to conduct my thesis study (Creswell, 2014; Creswell & Plano Clark, 2011; 2017).

Figure 2 illustrates the concurrent embedded mixed methods design model used in my study. In line with Creswell & Plano Clark's model the qualitative (qual) arm of the study was embedded within the quantitative (QUAN) arm of the study. This illustrates that the QUAN data (survey data) was the primary data and the qual data (interviews) provide a supportive secondary role. In Phase I, data collection and data analysis for the QUAN arm and qual arm were conducted concurrently (Creswell, 2014). Some of the participating youth who completed the

survey were also interviewed (individual interviews and focus groups) to gather insights on the youths' mental health. In Phase II the data interpretation stage, both data (the QUAN data and the qual data) were integrated to provide the mixed methods results.

Figure 2: Visual Diagram: Concurrent Embedded Mixed Methods Research Design



3.2 Research Questions

The overall aim of the study was to examine the mental health of immigrant Pakistani youth in Canada. Aspects of mental health of immigrant and Canadian-born Pakistani youth that may have value for understanding the larger Pakistani population in Canada were identified, measured and further explored through interviews. The three objectives of my study were outlined in Chapter 1: Summary and Study Rationale. To address study objectives 1 and 3, the following **quantitative research questions** and **hypotheses** guided the quantitative arm of the study:

1. Is there a positive relationship between *Health Composite* and the constructs of self-esteem, resilience and ethnic identity in immigrant and Canadian-born Pakistani youth?
    - Hypothesis: It is anticipated that higher levels of self-esteem, resilience and ethnic identity will be correlated with better health (*Health Composite*) among the sampled youth.
2. Is the health of youth (*Health Composite*) related to gender, region of birth, generation status, and household income?
    - Hypothesis 1: It is anticipated that male youth will have overall better health (*Health Composite*) than female youth.
    - Hypothesis 2: *Health Composite* will vary by region of birth. It is anticipated that immigrant Pakistani youth will have overall better health than Canadian-born Pakistani youth.
    - Hypothesis 3: *Health Composite* will vary by generation status. It is anticipated that first generation immigrant youth will have overall better health than 1.5 generation immigrant youth and second generation youth.
    - Hypothesis 4: It is anticipated that immigrant youth from higher income households will have overall better health than immigrant youth from lower income households.

3. Is there a difference in self-esteem, ethnic identity and resilience by gender, region of birth, generation status, and household income?

    - Hypothesis 1: It is expected that male youth will have higher levels of *self-esteem* than female youth in my sample.

- Hypothesis 2: It is expected that female youth will have higher levels of *ethnic identity* than their male counterparts.
- Hypothesis 3: It is expected that male youth will have higher resilience scores than female youth.
- Hypothesis 4: It is expected that youth in the lower income bracket will have lower levels of self-esteem, ethnic identity and resilience.

4. Is there a relationship between household income and migration factors (i.e. generation status and region of birth)?

- Hypothesis: It is expected that immigrant Pakistani youth (i.e. Eastern born youth and first generation and 1.5 generation youth) compared to Canadian-born Pakistani youth (i.e. Anglo-Western born and second generation youth) will belong to lower income households.

To address study objectives 1, 2 and 3, the following **qualitative research questions** guided the qualitative arm of my study:

1) What are the perspectives and experiences of immigrant and Canadian-born Pakistani youth regarding mental health and mental illness?
2) What are the perspectives and experiences of immigrant Pakistani parents towards youths' mental health?

The following **mixed methods research questions** guided my study at the integration and interpretation phase:

3) What are the specific mental health needs of immigrant Pakistani youth by gender and generation status?

4) In what ways do Pakistani youths' identities such as gender, race, migrant status, class, socioeconomic status and religion shape their mental health?

3.4 Quantitative Arm of Study

In this section, I describe the process of conducting the quantitative methods.

3.4.1 Data Collection

3.4.1.1 Participants

The inclusion criteria for participants were as follows: youth were eligible to participate in the quantitative arm (and qualitative arm) of the study if they:

- had immigrated to Canada under a skilled worker class[3], business class or family class, and were of Pakistani ethnicity[4];
- were Canadian-born, and parents were immigrants of Pakistani ethnicity;
- were 18-24 years old and were residents of the city of Toronto, or municipalities of York, or Peel; and
- had basic English proficiency.

3.4.1.2 Sampling

I used convenience sampling and network/snowball sampling to recruit youth for the QUAN arm of the study. The purpose of using two or more sampling strategies was to maximize recruitment of Pakistani youth. Participating youth in the QUAN arm of my study were also invited to take part in an individual interview and/or focus group discussion for the qual arm of the study. Ideally, sampling for the QUAN arm of the study should have been random, but this

[3] Although, there are various programs under which people may apply to immigrate to Canadian, three major programs skilled worker class, family sponsored, and business class were prioritized.
[4] If one, or both, parents were born in Pakistan, the youth was considered to have Pakistani ethnic background.

was not possible given there were no population sampling frames available for immigrant Pakistani and Canadian-born Pakistani youth.

Convenience sampling is a non-random sampling technique in which members of the target population are willing to participate in a study at a given time (Teddlie & Yu, 2007) and are easily accessible (within geographical proximity) (Etikan, Musa, & Alkassim, 2016). As random sampling was a challenge and convenience sampling, although a weak form of sampling with its limitations (it does not provide a representative result), allowed me to conduct the first study in Canada on immigrant and Canadian-born Pakistani youths' mental health.

Network or snowball sampling technique, also referred to as "chain referral," is an informal method to reach a target population. One subject refers to the researcher another person of similar characteristics, who in turn provides the name of a third person, and so on (Bassil & Zabkiewicz, 2014; Dancey , Reidy, & Rowe, 2012). The benefits of using snowball sampling is that it enables access to hidden and hard to reach populations, and is economical, efficient and effective. Limitations of this technique include confidentiality concerns (Johnson, 2014), selection bias (which limits the validity of the sample), and lack of generalizability from the sample (Atkinson & Flint, 2001).

Sample size estimation is an important step in the design of a study, yet, it can be quite challenging in a mixed methods study (Sandelowski, 1995). Sample size has an effect on the statistical power; the probability that a statistical test will enable detection of a statistically significant difference between two groups if a difference is truly present (Eng, 2003). To calculate the sample size, researchers need to carefully consider certain elements of a study including: 1) the research objectives, 2) the research questions, and hypothesis of interest, 3) the research design (Onwuegbuzie & Collins, 2007), and the appropriate statistical tests (Chow,

Wang, & Shao, 2007). Sample size can be determined using different approaches, such as: i) census of populations, ii) published tables (Cohen, 1988), iii) formulas to calculate a sample size, or iv) imitating a sample size of similar studies (Kasiulevičius, Šapoka, & Filipavičiūtė, 2006). In my study, sample size calculation ideally would have utilized a power-based approach (related to hypothesis testing and detecting an effect of an outcome) to test the equality of means between two populations (Chowdhury, Sikdar, & Turin, 2017), but as population estimates were not available for the population of interest for the outcome of interest *Health Composite* (it is a new indicator developed in my study) this approach was not taken. The "imitating the sample size of similar studies," approach as described by Kasiulevičius et al. (2006, p. 226) was utilized. Using this approach, the sample size for the QUAN arm was determined to be **120** youth. Sample estimates from four studies with similar research designs (mixed methods) and research focus (immigrant mental health) were considered for imitation. The studies considered were; 1) a mixed methods study by Khanlou and colleagues (Khanlou, Koh, & Mill, 2008) which investigated cultural identity and experiences of discrimination among 45 participating immigrants; 2) a mixed methods participatory action research (PAR) study by Etowa and colleagues (Etowa, Keddy, Egbeyemi, & Eghan, 2007) which explored depression in 113 immigrant women living in Nova Scotia, Canada; 3) a study by Khanlou et al. (Khanlou, Shakya, & Muntaner, 2009) which explored mental health in 56 immigrant youth using a survey to gather data; and 4) a longitudinal mixed methods study by Benoit and colleagues (Benoit, Westfall, Treloar, Phillips, & Jansson, 2007) investigating the connection between social factors and prevalence of post-partum depression among 93 mothers of diverse backgrounds. All the above were mixed methods studies on mental health issues among immigrant populations. The chosen studies did not calculate a sample size, nor did they report statistical power.

3.4.1.3 Procedure

Ethics approval was provided by York University's Office of Research Ethics. Data were collected between April 2017 and October 2018. I contacted over a dozen newcomer settlement agencies registered with the Ontario Ministry of Citizenship and Immigration and the Ontario Council of Agencies Serving Immigrants (OCASI) as serving South Asian communities across Peel region, city of Toronto, and York region through email, phone or in person to advertise the study. The agencies posted the study recruitment flyers on their bulletin boards and agency newsletters, and circulated them in their networks and to potential candidates.

The recruitment flyer (see Appendix A) invited eligible youth to participate in the study, through one or more modes of data collection, including survey, focus group, or an individual interview. The recruitment flyer provided a brief description of the study, what participants were expected to do and the study contacts. It also included a link to the web-based survey. The youth recruitment flyer was also emailed to our research networks; posted on notice boards of two mosques, two colleges and two universities in the GTA. It was also posted on Facebook and Instagram accounts of college and university student associations (e.g., Pakistani, Muslim, and Punjabi student groups). Flyers to recruit parents and service providers were also distributed to our community networks, and mosque clerics. The survey was piloted among three immigrant Pakistani and two Canadian-born Pakistani youth, to test its face validity. The youth provided specific and general input on the relevancy and clarity of the questions, including rephrasing the preamble of the survey, and rewording of one question. Their input was incorporated in the final survey questionnaire (see Appendix C).

The semi-structured survey was offered in English, in both paper-based and on-line (web-based survey) format. The link to the web-based survey was emailed to participants who showed

willingness to participate. This was done after they were screened for eligibility. Eighty-one[5] youth completed the survey, of these 41 took the paper-based survey and 40 completed the web-based version. The response rate for the paper-based survey was approximately 70%. The response rate for the web-based survey could not be determined, because the number of youths reached through the recruitment flyers or social media posters is unknown. Youth who participated in the qualitative individual interviews and/or focus group also completed the paper-based survey. Using different methods to administer the survey can produce different response rates (Kiesler & Sproull, 1986; Zhang, Kuchinke, Woud, Velten, & Margraf, 2017). A systematic review (Fan & Yan, 2010) listed the factors that influence survey response rates. These include sampling method, the characteristics of participants, method of contact (how respondents are invited, informed, and reminder notifications sent), survey tools (questionnaire length, content and presentation), survey modes (mail, telephone, or web based), and monetary incentive (Munoz-Leiva, Sanchez-Fernandez , Montoro-Rios, & Ibanez-Zapata, 2010; Fan & Yan, 2010; Sheehan, 2001; Jackson & Trochim, 2002). Web-based surveys are popular, convenient and accessible methods of data gathering, but the response rates can vary by internet usage of participants (internet usage differs by age groups, gender, and education levels) (Bandilla, Bosnjak, & Altdorfer, 2003). However, Bandilla et al. (2003) note that this difference is minimized when respondents are of similar education level, in particular with higher education. In my study, response rates difference was minimized because of the narrow age range (18-24 years), and education level (grade 12 high school and post-secondary education) of participants. The preamble of both the paper-based survey and the web-based survey participants

[5] Recruiting participants for the study was more challenging than I had anticipated. This may be because it was a community-based study, the stigmatized nature of mental illness, and specific ethnicity and narrow age range for recruits. The goal was to reach 120 youth who could complete the survey, but after utilizing multiple recruitment approaches and stretching recruit time a total of 81 youth completed the survey.

provided informed consent. Participants were ensured privacy, anonymity, and informed that participation and withdrawal from the study was voluntary. Renumeration for survey participation included e-gift cards or cash gifts.

3.4.1.4 Data Gathering Instrument: Survey

Table 1 shows details of the survey items and their sources. The survey tool was a questionnaire with three sections, including: 1) demographics, 2) health indicators, and 3) psychological scales. (See Appendix C: Youth survey questionnaire).

Table 1: Survey Items and Their Sources

Topic and sections	Items	Sources
Section 1: Socio-demographics characteristics	• Age, gender • Birthplace, years in Canada • Family income • Education • Living situation	Canadian Community Health Survey Youth Health Survey
Section 2: Mental health and wellbeing	• Self-rated health • Self-rated mental health • Emotional health • Social health • Self-rated stress • Treatment received	Ontario Child Health Study (OCHS) (2014) National Household Survey 2011
Section 3.1: Self-esteem	• Perception of own emotional health • Sense of self-worth	Current Self-Esteem Scale (CSE)
Section 3.2: Resilience	• Individual coping traits • Relationship and support from parents, family and friends • Contextual factors that facilitate a sense of belonging in the community and at school	12- item Child and Youth Resilience Measure (CYRM-12)
Section 3.3: Ethnic identity	• Perception of meaning of own ethnic identity • Sense of belonging to own ethnic group	12-item Multigroup Ethnic Identity Measure (MEIM)

3.4.1.4.1 Health, Mental Health and Wellbeing.

This section of the survey consisted of closed-ended single-item questions on physical health, mental health, social health, stress levels, daily stress levels, and questions on emotional and day to day accomplishments. To estimate the general health and mental health in the youth, I used the single-item questions "In general, how would you rate your health?" and "In general, how would you rate your mental health? The items captured an individual's perception of their physical health or mental health in relation to others in their age group (Bombak, 2013). The health items are reliable indicators of general health and mental health. The responses to self-rated health and mental health items were rated as poor, fair, good, very good, and excellent. A score of 1 represented poor mental health and a score of 5 represented excellent mental health. The single-item health indicators have been widely used in population-based studies [such as the Short Form Health Status Survey (Rand Healthcare, n.d) and Canadian Community Health Surveys) (Perez, 2002; Statistics Canada, 2012)] and in the health research such as World Mental Health Clinical Diagnostic Interview Schedule (Ahmad, Jhajj, Stewart, Burghardt, & Bierson, 2014; Benyamini, 2011; DeSalvo, Bloser, Reynolds, He, & Muntner, 2006). The health items are useful in making predictions on future disease morbidity and mortality. The mental health indictor also provides reliable estimates of mental disorders, distress and mental morbidity measures in populations (Mawani & Gilmour, 2010). A poor rating on the indicator has been linked to increased health problems, stress levels, poor health, poverty and Social Determinants of Health (Ahmad et al., 2014).

Stress was measured by asking "*thinking about the amount of stress in your life, would you say that most days are stressful*?" and the responses ranged from not at all stressful, not very stressful, a bit stressful, quite a bit stressful, to extremely stressful. A score of 1 accounted for

"extremely stressful" and a score of 5 for "not at all stressful." To capture the youths' day to day struggles and stressors their social health was measured by asking "*Have emotional problems interfered with your normal social activities with family, friends, neighbors, or groups*?" The responses reported were not at all, slightly, moderately, severely, and very severely. A score of 1 accounted for "very severely" and a score of 5 for "not at all." Emotional health was measured by asking youth "*During the past 4 weeks, have you had any of the following problems with your school or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?"* Respondents could select one or all options:1) cut down the amount of time you spent on work or other activities, 2) accomplished less than you would like, and 3) didn't do work or other activities as carefully as usual. The last question on the health section of the survey was an open-ended question asking respondents if they had received individual or group counselling for any mental health problems, such as emotional, attention or behavioural, or alcohol or drugs use. (See Appendix C: Youth Survey Questionnaire).

3.4.1.4.2 Health Composite.

To capture the overall health of the youth, I developed a *Health Composite* scale for this study. The scale is the average of the numeric responses for four health indicators on the survey, including physical health, mental health, social health, and stress level. The internal reliability using Cronbach's alpha of the four health items making the *Health Composite* was strong at 0.823. The scale represents health as a holistic composite of all of these elements. In fact three of the four components on the *Health Composite* score (stress, social and mental health) are measures of mental health, so in a way the scale represents mental health more than physical health. Emotional health, the fifth item on the survey was not included as it was not measured on a 5-point scale.

3.4.1.4.3 Multigroup Ethnic Identity Measure [MEIM] Scale.

Ethnic identity was measured using Phinney's (1992) Multigroup Ethnic Identity Measure [MEIM]. The scale measures ethnic identity as a general phenomenon in individuals and has been widely used to measure ethnic identity across various ethnic groups. Others have used the scale: for example a study examined the effects of being a minority/majority on the self-esteem and ethnic identity of Asian and European Americans living in United States and Hawai'i (Xu, Farver, & Pauker, 2015). Another study examined the mediating role of self-esteem on ethnic identity subscales and externalizing problem behaviour in Dutch, Turkish-Dutch and Moroccan-Dutch adolescents living in the Netherlands (Wissink, Deković, Yağmur, Stams, & de Haan, 2008).

The MEIM scale has 12 items and uses a 4-point Likert scale (a score of 1, for strongly disagree to a score of 4, for strongly agree). The MEIM has two subscales; the *Ethnic Identity Exploration/Search* represents the average score on questions 1, 2, 4, 8 and 10 on the MEIM, and measures an individual's exploration about their own ethnic group, such as learning about its history, traditions, and customs; and the *Ethnic Identity Affirmation and Belonging* is the average score on questions 3, 5, 6, 7, 9, 11 and 12 and measures belonging and membership to one's own ethnic group. The MEIM has been used in dozens of studies and consistently shown good reliability across age groups, and ethnic groups (Cronbach's alpha > .80), such as Pakistani Americans (n =155, Cronbach's alpha > .83) (Roberts et al., 1999). In my study, the Cronbach's alphas for MEIM overall Ethnic Identity was 0.863, Ethnic Identity Exploration/Search was 0.712 and Ethnic Identity Affirmation was 0.835.

3.4.1.4.4 Current Self-Esteem (CSE) Scale.

To measure self-esteem among the participants, I used the Current Self-Esteem (CSE) scale (Khanlou, 1999; 2004a). The CSE has been used in studies examining self-esteem among immigrant youth. Some examples of studies using the scale are those exploring health promotion, self-esteem and self-concept among newcomer and East Indian Canadian female adolescents (Khanlou & Hajdukowski-Ahmed, 1999; Khanlou, et al., 2002; Khanlou, 2004a; Khanlou, Shakya, & Muntaner, 2009). The CSE is made up of four questions. The first question asks, "How have you felt about yourself over the past week?" Response are reported on a visual analogue scale from 1 to 10. A score of 1, indicates "didn't feel good about myself," and a score of 10 indicates "felt great about myself." The other questions on the CSE are open-ended; 1) "What things you made you feel GOOD about your-self?" 2) "What things made you feel NOT GOOD about yourself?", and 3) "What things can you DO TO FEEL GOOD about your-self?" The numeric scores obtained on the scored single item on the CSE were used in the quantitative statistical analysis. As other three items on the Current Self-Esteem score were open ended questions a reliability score is not reported for the scale. The responses on the CSE open-ended question were analyzed using content analysis to identify factors that promote self-esteem or hinder it.

3.4.1.4.5 Child and Youth & Resilience Measure (CYRM-12).

I used the Child and Youth & Resilience Measure (CYRM-12) (Unger , et al., 2005). The CYRM was developed to measure resilience among culturally diverse youth for ages 12 to 23 years and takes account of their contextual factors. The CYRM-12 was suitable to use in my study given the population understudy. A methodological review by Windle and colleagues (2011) to assess the psychometric properties of different resilience scales identified five

resilience measures as conceptually and theoretically superior. CYRM was amongst these five. The other four top rated resilience scales were; 1) Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), 2) Resilience Scale for Adults (RSA) (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003), 3) the Resilience Scale (Wagnild & Young, 1993), and 4) the Brief Resilience Scale (Smith, et al., 2008).The CYRM measure has been used in 11 countries and in 11 languages. It continues to be used worldwide.

The CYRM-28 consists of 28 questions, and measures resilience across four domains, the individual, relational, community and culture. The CYRM-12 used in my study is a shortened version of the CYRM-28 (Ungar & Liebenberg, 2011). The CYRM-12 measures overall resilience, individual traits, relationship to caregiver, and contextual factors that facilitate a sense of belonging. The responses are recorded on a 5-point scale, from *not at all* (score of 1) to *a lot* (score of 5). The CYRM measure has adequate content validity to qualify as a screening questionnaire for the process of resilience in youth (Lienenberg, Ungar, & LeBlanc, 2013), and a Cronbach's alpha for the 12 items was satisfactorily reliable ($\alpha = 0.840$). The use of the CYRM-12 scale in my study was highly reliable ($\alpha = 0.894$).

3.4.2 Data Compilation and Recoding of Variables

The data from the paper and web-based survey were compiled on an Excel file and then imported to SPSS $_{TM}$ version 26 for statistical computing. Value labels and codes were assigned to categorical variables, for example, "gender" was coded as male (1), and female (2). None of the participants selected "other" as their gender, therefore, this category was removed in the data analysis. Annual household income was reported as five income categories on the survey. For the purpose of statistical analysis, it was recoded in three income groups, including low income group (< 30K), middle income group (> 30K and < 70K), and high income group (above 70K).

Two migration related variables were created, which were *generation status* and *region of birth*. The variable *generation status* categorized Pakistani origin youth in three groups, based on their age at migration or birth in Canada. These included: the 1.5 generation youth, who had migrated before12 years of age; first generation youth, those who had migrated after 12 years of age; and second generation youth were those who had been born in Canada. This new variable was created by subtracting the number of years lived in Canada from the youths' age at the time of taking the survey.

The variabl*e region of birth* comprised of two groups Eastern born youth, and Anglo-Western born youth. Youth born in Pakistan or Middle East belonged to the Eastern born youth group, and those born in Canada, USA, and Australia belonged to the Anglo-Western born[6] youth group. The designated *four independent variables* were gender, region of birth (two groups: Eastern born, and Anglo-Western born), generation status (three groups: first generation, 1.5 generation and second generation) and household income (three groups: low, middle and high income). The designated *four outcome variables* were *Health Composite*, Current Self-Esteem (CSE), ethnic identity (MEIM), and resilience (CYRM).

3.4.3 Quantitative Data Analysis

Quantitative data were analyzed in SPSS $_{TM}$ version 26. To summarize the sample characteristics descriptive statistics were conducted. Demographics of the overall sample, and by migration groups (generation status and region of birth) were computed as frequencies. Means and standard deviations for the dependant/outcome variables, *Health Composite* (including sub

[6] The term Anglo-Western is closely similar in meaning to the acronym CANZUK, which represents the theoretical political and economic community consisting of Crown countries, include Canada, Australia, New Zealand and the United Kingdom.

items), resilience, self esteem, and ethnic identity were generated by gender and migration groups.

Chi-square test of significance was computed to test association of household income by region birth and household income by generation status. This in part addressed research objective number 3; to examine the factors that influence the mental health of immigrant and Canadian-born Pakistani youth. In order to answer the first QUAN research question, “Is there a positive relationship between *Health Composite* and the constructs of self-esteem, resilience and ethnic identity in immigrant and Canadian-born youth?” a correlation analysis was conducted to show if youths’ overall health differed across self-esteem, resilience and ethnic identity. Logistic regressions were conducted to answer the QUAN research question 2 “Is the health of youth (*Health Composite*) related to gender, region of birth, generation status/age of migration, and household income?”

Logistic regressions assessed the association between *Health Composite* and four independent/predictor variables: 1) gender, 2) household income, 3) generation status and 4) region of birth. Multiple linear regressions were computed to answer QUAN research question 3 “Is there a difference in self-esteem, ethnic identity and resilience by gender, region of birth, generation status, and household income?” Multiple regression was utilized following the rule which limits the ratio of number of independent variables: number of observations at 1:10. I tested 4 independent variables and had 81 observations/participants, so this rule was observed. The hypotheses were tested in the predicted direction. A significance level of $\alpha = 0.05$ was assumed.

The open-ended question on help for mental health problems and the three open-ended questions on the Current Self-Esteem scale (CSE) were analyzed through iterative content

analysis (Sandelowski, 2000). Dominant ideas were coded, and emerging themes were identified. Content analyses are specific dynamic approaches that entail human analysis of text and "summarizing the informational contents of that data" (Sandelowski, 2000, p. 338) Content analysis was reflexive and interactive (Altheide, 1996; Sandelowski, 2000). I discussed with my supervisor the information derived from the collected data and reflected on new insights that emerged and also compared my findings to the coding scheme developed for the CSE by Khanlou (2004a). I developed codes to organize ideas and summarized the information in tables.

3.5 Qualitative Arm of the Study

Qualitative methods are informed by purposeful sampling, collection of open-ended data, analysis of text and personal interpretation of the data (Creswell, 2014). The benefits of using qualitative theory driven open-ended inquiry are that it provides description, depth, context, and process rather than quantity (Thorne, 2016). Qualitative methods of gathering knowledge include in-depth individual interviews and focus groups, which are subjectively derived information. In individual interviews, participants can freely tell their story in a manner that is meaningful to them (Thorne, 2016). The intimacy between interviewer and interviewed can reduce discomfort and barriers and uncover hidden realities that may not be achieved in a group context (Thorne, 2016). Rather than focussing on individual differences focus groups uncover or create shared experiences (Thorne, 2016; Håkanson, Sahlberg-Blom, Ternestedt, & Nyhlin, 2012) Therefore, I used both in-depth interviews and focus groups to understand the experiences of mental health of immigrant and Canadian-born youth.

3.5.1 Data Collection

3.5.1.1 Participants

The eligibility criteria for youth to participate in the qual arm of the study was the same as for the QUAN arm and given in Section 3.4.1.1. Parents were eligible to participate in the qual arm of the study if they were born in Pakistan or identified as belonging ethnically to Pakistan and had an adult child 18-24 years. Service providers were eligible to participate in the qualitative individual interviews, if they served Pakistani immigrant families with youth ages 18-24 years.

3.5.1.2 Sampling

I used purposive sampling to recruit youth, parents and service providers for the qual arm of the study (individual interviews and focus groups). Purposive sampling is a type of a non-probability sampling technique that uses the expert judgment of the researcher to recruit a small number of cases (a sample of information rich participants) that will yield maximum information about the phenomena under study or the research question asked (Tashakkori & Teddlie, 2003; Teddlie & Yu, 2007).

An adequate sample size in a qualitative study (the qual arm of my mixed methods study) is guided by four fundamental factors, the researcher's judgment, the researcher's experience, the quality of information to be collected and its proposed use (Sandelowski, 1995; 2010). Another yardstick for qualitative sample size estimation is "saturation" (Hennink, Kaiser, & Marconi, 2017). According to this principle when "data saturation" or "thematic saturation" is reached — that is when no new information emerges from the data — data collection can be discontinued (Guest, Bunce, & Johnson, 2006). Hennink et al. (2017) determined that code saturation ("heard it all") was reached at 9 interviews, while meaning saturation ("understand it all") was reached at

16-24 interviews. In my study the goal was to conduct 14 individual interviews (with 8 youth, 4 parents and 2 service providers) and 6 focus group (4 youth focus groups and 2 focus groups with parents).

3.5.1.3 Procedure

As per Creswell and Plano Clark's concurrent embedded mixed methods, the qual data were collected from August 2017 to February 2018, when QUAN data collection was being conducted. Three In-Depth Interview Guides (see Appendices D, E, and F) and two Focus Group Guides (see Appendices F and H) were used to collect the qual data from youth, parents, and service providers. The interview and focus groups were conducted at York University and convenient locations such as a library or a settlement service office that were closer to the participant's home. After brief introductions participants had the process explained, including the consent forms and the estimated time to complete the interview or focus group. At the start of the interview or focus group all participants signed an informed consent, (See: Appendix I) and completed a demographic information sheet similar to the one used in the survey (See under in-depth and focus group guides: Appendices D, E, and F). Table 2 shows the number of participants and their gender in the interviews and focus groups.

All in-depth individual interviews (for youth, parents and service providers) were conducted face-to-face, except for one interview which was conducted over the phone with a youth. The duration of the individual interviews ranged from 45 to 60 minutes. Field notes to record the attitudes, behaviours, activities, and environment of participants were taken and supplemented in-depth interview data. Field notes are widely recommended in qualitative research to ensure rich contextual data is documented and persists beyond the interviewer (Phillippi & Lauderdale, 2018).

Table 2: Qualitative Arm: Participant Selection

Participant selection process			
	Quantitative data gathering	**Qualitative data gathering**	
Participant type	**Survey**	**Focus group discussion**	**Individual interview**
Youth 18-24 yrs.	81 youth	Focus group One (3 females and 2 males) Focus group Two (4 females and 4 males) Focus group Three (3 females and 2 males) **Total 18 youth**	4 males and 4 female youth
Parents of youth	Not required	2 focus groups (6 mothers in each) **Total 12 mothers**	3 mothers 1 father
Service providers	Not required	Not required	2 service providers
Total participants	81	30	14

I interviewed all 14 individuals for the in-depth interviews. Holding an insider view gave me an advantage as I interviewed the parents, youth and service providers: it enhanced my understanding of concepts expressed in Urdu and to remain sensitive while asking critical questions. It also enhanced the cultural bond and allowed participants to freely engage in discussions on sensitive social issues and mental health problems without feeling that they were being judged or stereotyped about their Islamic and conservative views.

I conducted a total of 5 focus group discussions, of these 3 were with youth and 2 with parents. Data collection was stopped when saturation was reached. Participants in the focus groups ranged from 5-7 in number. The focus group discussions took 1- 2 hours to complete and

the duration was determined by how the study participants interacted with each other and the topic under discussion.

My aim was to achieve gender parity (relative equality in terms of numbers or proportions of either gender) in recruiting participants for the individual interviews and focus groups. Almost an equal number of female and male *youth* participated in the study. Taking into consideration the Pakistani cultural values and norms, initially two separate focus groups with fathers and mothers were planned. On conducting face-to-face interviews with 2 mothers, they suggested that fathers would participate in the focus groups if I invited parent couples (husband and wife together). Based on their suggestions, both fathers and mothers were invited to bring the other partner to the focus group. Although three fathers indicated interest in the study, but they did not participate. Therefore, the parent focus groups consisted of mainly mothers and no participation by fathers.

3.5.1.4 Data Gathering Instruments: Interviews and Focus Groups

Qualitative data was collected using interview guides and focus group guides consisting of both semi-structured questions and open-ended questions (see Appendices D, E, F, G, and H). The guides helped to gather subjective understanding of the phenomenon under study. The interview and focus group questions asked question about the youths' family makeup, socioeconomic status, their perceptions about mental health, any current and past experiences with mental health issues and the health status of their immediate families. Social conditions form an essential part of the contextual and analytical framework of research on immigrant populations. A systems approach to the interview questions helped draw on the social, cultural and systemic challenges experienced by the Pakistani immigrant youth at the individual, family, school, and community level.

Parents were interviewed in the Urdu language, with some English words and phrases used when needed. With some assistance of an expert in both Urdu and English languages, the English interview guides and focus group guides were translated in the Urdu[7] language. Parents were asked similar questions on their migration experiences as a family with accompanying children and experiences with mental health in Canada. Youth and parents were both questioned about their migration and settlement experiences in Canada, including how race, ethnicity and gender in the context of family, school, neighbourhood affected mental health. The purpose of interviewing both parents and youth was to capture similarities and differences in beliefs, attitudes, behaviours and cultural practices towards mental health in the older generation and the younger generation, and where statements from parents contradicted the youths' statements and vice versa. At the end of the interview and focus group participants were asked to provide recommendations that could improve the mental health of immigrant youth, such as raising awareness, and seeking help and treatment for mental health issues. Youths' and parents' concerns expressed during the focus group discussions were noted and were used to revise subsequent questions on the individual interviews and focus groups.

The two service providers interviewed were asked to describe general and specific problems that newcomer Pakistani youth faced and the factors that may influence their mental health and wellbeing. They were also asked to identify the type of services immigrant Pakistani youth and their families typically accessed and those that they needed but were not available. Service providers were also asked to recommend programs and services that could improve the mental health of immigrant Pakistani youth. Given that resources are often scarce, and some

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7 Urdu is the national language of Pakistani people.

programs and services are prioritized over others, service providers were asked which social programs and healthcare services were the most crucial for immigrant Pakistani youth and their families. All individual interviews and focus group discussions were audiotaped and transcribed using verbatim transcription. The audio recordings of interviews in Urdu were translated and transcribed in English.

3.5.2 Qualitative Data Analysis

The audio recordings of individual interviews and focus group discussions were transcribed verbatim and analyzed simultaneously. These findings then informed the interview questions to further probe the next set of focus group and individual interviews, and to stimulate discussions during the interviews. I applied a qualitative descriptive (Kim, Sefcik, & Bradway, 2017; Polit & Beck, 2014), and thematic analysis (Creswell, 2014) to analyze the qualitative data. A qualitative descriptive method is often used when a researcher wants to know "the who, what, and where" of the narratives of a population under study (Sandelowski, 2000, p. 338; 2010), and allows the researchers to stay close to the original data without transforming it too much (Kim et al., 2017; Neergaard, Olesen, Andersen, & Sondergaard, 2009). Qualitative description was suitable for the analysis of the qual arm of my mixed methods study, based on the purpose of my study, sampling approach, conducting individual interviews and focus groups, and use of semi-structured interview guides (Kim, et al., 2017; Neergaard, et al., 2009; Sandelowski, 2000).

The qualitative data was hand coded and thematically analyzed, guided by Creswell (2014), and Carlender et al. (2011) The data was complemented with field notes (Phillippi & Lauderdale, 2018). The volumes of data gathered from 14 individual interviews and five focus groups, required meticulous attention to preparing, sorting, organizing and coding. Transcribed

data were thoroughly reviewed to get a general sense of the information and to reflect on the factors that influenced the participants mental health. At the beginning my supervisor and myself read and coded five transcripts separately then met to compare and contrast the codes. We refined the codes; then I continued to apply the refined codes to the rest of my data set. More in-depth analysis was conducted to seek similarity and differences in participants' perspectives. Data were sorted on an Excel file and similar and repeated concepts were identified, and colour-coded and labelled as codes. Prominent, repeated and persistent concepts (topics) were grouped in relation to each other and collapsed into themes. The emergent themes were corroborated with the literature and discussed with my supervisor. As I read through the data, I highlighted important quotes that could be used as "quotable quotes," these were saved. The preliminary findings were shared with students, researchers and academia at conferences. The feedback stimulated revisiting the transcripts and deeper analysis of themes.

3.5.5 Rigor and Trustworthiness

Trustworthiness is a criterion to judge the quality of qualitative research (Lincoln & Guba, 1985) proposed. The concept parallels the standards of reliability and validity of quantitative studies. Trustworthiness is established when enough details on methods of analysis are provided to show that it was conducted in an accurate, consistent and exhaustive manner and by recording and systematizing data (Nowell, Norris, White , & Moules, 2017). The strategies to achieve methodological rigor and trustworthiness in the qual arm of the research process were applied including the use of multiple data collection techniques (triangulation of collected data) and continuous reassessment and reiteration of that data (Cypress, 2017; Lincoln & Guba, 1985).

Lincoln and Guba (1985) propose four criteria to establish trustworthiness in a qualitative study, which are: transferability, dependability, confirmability and credibility. These four criteria

that establish trustworthiness were built in the qualitative component of my study, as follows: 1) *transferability* was addressed by providing thick description. For example, detailed description on numbers and types of participants, sampling technique, inclusion and exclusion criteria, and details on individual interviews and focus groups were provided. The detailed descriptions will allow other researchers to transfer the findings to a similar population in their own location and make their own judgements. 2) To achieve *dependability*, I ensured the details were clearly documented, logical, and traceable. This will allow other researchers or readers to examine the research process and judge if the study is dependable. All data collected is stored for possible audit and copies also provided to my supervisor (hence it is auditable). 3) *Confirmability* concerns that the researcher's interpretations and findings are clearly derived, so as to allow researchers to understand why certain theoretical, methodological, and analytical choices in the study were made (Nowell, Norris, White , & Moules, 2017). In my study, I provide the rationale for choices made at each stage of the qualitative process. I also documented field notes (Phillippi & Lauderdale, 2018) immediately after each interview and focus group. Field notes record rich contextual details not captured through the transcripts and provide critical reflections, that supplement the analysis of the data. 4) *Credibility* was achieved by reviewing the interview and focus group transcripts and the coding and themes by my supervisor. We discussed and confirmed findings and emergent themes. *Member checking* was achieved by contacting three youth (follow up email) and one parent (follow up phone call) and sharing with them the major findings. In this way I received respondent validation and verified that the interpretation of the data was accurate and relatable. Youth agreed to the findings from interviews and felt their voices were represented.

In concurrent embedded mixed methods study the QUAN data and qual data are not equal in size and rigor (Creswell & Plano Clark, 2011). The mixed methods guidelines recommend: utilizing rigorous quantitative research (the magnitude and frequency of constructs is assessed) and rigorous qualitative research (the meaning and understanding of constructs is explored); utilizing multiple methods of data collection; and integration of the qualitative and quantitative methods to draw on the strengths of each method (Creswell & Plano Clark, 2011; 2017).

3.5 Chapter Summary

In this methods chapter, I described the concurrent embedded mixed methods research design utilized in my study and guided by Creswell and Plano Clark's methodology (2011, 2017). I presented the quantitative research questions (and the associated hypotheses), the qualitative research questions and the mixed methods questions. The 81 youth (age 18-24 years) participating in the quantitative arm of the study were recruited using a convenience sampling and network/snowball sampling technique. QUAN data was gathered through paper and web-based survey and analyzed on SPSS $_{TM}$ version 26. Purposive sampling was utilized to recruit youth, parents and service providers for the qual arm of the study. Data for this arm of the study was gathered through 14 in-depth interviews and five focus groups. It was hand coded and analyzed using qualitative descriptive and thematic analysis. In the following chapters, I present the findings from the QUAN data and qual data.

Chapter 4: Quantitative Arm Study Results

Reporting of results in a mixed methods study is complex because of the extent of data being collected (Gioia, 2004). Through my mixed methods study, I gathered both quantitative data and qual data to arrive at a comprehensive understanding of immigrant and Canadian-born Pakistani youths' perspectives on mental health. In this Chapter, I report on the results of the QUAN arm of the study. First the demographic characteristics of sampled youth are presented as percentages and summarized by gender, country of birth, education, and household income. In the next section, household income is presented by generation status and region of birth. Household income between groups (gender, generation status and region of birth) is compared using a chi-square test of significance. Next, the sample means for *Health Composite* (Table 7) self-esteem, ethnic identity and resilience (Table 8) are summarized. The intercorrelations of the *Health Composite* sub items and the correlations of *Health Composite* with self-esteem, ethnic identity and resilience are presented in Tables 9 and 10. After these, the results of logistic regressions, and multiple linear regressions computations are presented in Tables 12 and 14 and explained in text. Lastly, the findings of the open-ended questions on the CSE scale and mental health sections of the survey are described and summarized.

4.1 Demographic Characteristics of Youth

Table 3 illustrates the demographic characteristics of 81 survey respondents whose age ranged from 18-24 years. The sample mean age was 20.5 years. More girls compared to boys and more Pakistani-born youth compared to Canadian-born youth participated in the study. The average number of years youth had lived in Canada was 10.5 years. A greater number of youth (n = 62) attending university or college participated in the study compared to youth who had either completed or were attending high school (n = 19).

Table 3: Demographic Characteristics of Sample

Variable	Category	N=81	*Group %*
Gender	Male	30	*37*
	Female	51	*63*
Place or birth	Pakistan	51	*63*
	Canada	18	*22*
	USA	4	*5*
	Australia	2	*2.5*
	Middle East	6	*7.4*
Age range	18-24 years		
Education level	Attending high school	14	*17*
	Graduated high school	5	*6*
	Attending college	5	*6*
	Completed college	7	*8.6*
	Attending university	50	*62*
Annual income $			
	Less than 30K	23	*30*
	30K to <50K	20	*26.6*
	50K to < 70K	18	*24*
	70K to < 100K	6	*8*
	100K or more	8	*10.6*
Languages spoken	English	81	*100*
	Urdu	81	*100*
	Punjabi	33	*40*
	Pushto	3	*3.7*
	Gujrati	1	*1.2*
	French	3	*3.7*
	Arabic	1	*1.2*

Amongst the 81 participating youth 75 reported their household income. Of these about one-third belonged to a household with an annual income of less than 30K, and more than one-fourth belonged to a household with an income between 30k and 50K. Both English and Urdu were spoken by all youth. Punjabi was spoken by a substantial number (40%) of youth.

Table 4 presents the characteristics of the survey respondents by region of birth. A greater percentage of Anglo-Western born youth were attending post-secondary institutions compared to Eastern born youth.

Table 4: **Characteristics of Youth by Region of Birth**

Variable	Groups/categories	Eastern born N=57		Anglo-Western born N=24	
		n	*Group %*	n	*Group %*
Gender	Male	23	*40.4*	7	*29.2*
	Female	34	*59.6*	17	*70.8*
Education level	Attending high school	12	*21.2*	2	*8.3*
	Graduated high school	5	*8.8*	0	*0*
	Attending college	3	*5.3*	2	*8.3*
	Completed college	7	*12.3*	0	*0*
	Attending university	30	*52.6*	20	*83.3*
Annual income $					
Low income	Less than 30K	20	*35.1*	3	*12.5*
Middle income	30K to <50K	14	*24.6*	6	*25*
	50K to < 70K	11	*19.3*	7	*29.2*
High income	70K to < 100K	3	*5.3*	3	*12.5*
	100K or more	3	*5.3*	5	*20.8*
	Missing	6			

Table 5 present the characteristics of the survey respondents by region of birth and generation status. Almost an equal number of male and female first generation youth took the

survey, whereas a higher percentage of female youth compared to male youth (from the other groups) took the survey. A higher percentage of second generation youth (Canadian-born) compared to the other youth groups were attending a post secondary institution.

Table 5: Characteristics of Youth by Generation Status

Variable	Groups/categories	Second generation *n* =18		1.5 generation *n* =28		First generation *n* =35	
		n	Group %	n	Group %	n	Group %
Gender	Male	5	*27.8*	7	*25*	18	*51.4*
	Female	13	*72.2*	21	*75*	17	*48.6*
Education level	Attending high school	2	*11.1*	7	*25*	5	*14.3*
	Graduated high school	0	*0*	3	*10.7*	2	*5.7*
	Attending college	1	*5.6*	2	*7.1*	2	*5.7*
	Completed college	0	*0*	2	*7.1*	5	*14.3*
	Attending university	15	*83.3*	14	*50*	21	*60*
Annual income							
Low income	Less than 30K	2	*11.1*	10	*35.7*	11	*31.4*
Middle income	30K to < 50K	5	*27.8*	8	*28.6*	7	*20*
	50K to < 70K	6	*33.3*	3	*10.7*	9	*25.7*
High income	70K to <100K	1	*5.6*	4	*14.3*	1	*2.9*
	100K or more	4	*22.2*	2	*7.1*	2	*5.7*
	Missing	6					

4.2 Household Income by Migration Groups

Quantitative research question 4 asked whether household income was associated to generation status and region of birth. This answer to this question was solved using five income categories. Annual household income was compared by generation status, and region of birth. As hypothesized, a statistically significant association between household income and region birth

was found. A Pearson chi-square test of independence showed the following results: χ^2 (4, n = 81) = 14.59, (p = .006). As predicted household income was also associated to generation status: χ^2 (8, n = 81) = 19.822, (p = .011).

Table 4 shows the number and percentage of youth by region of birth living in low, middle, and high income households. Figure 3 illustrates the percentage of youth by region of birth in 5 levels of household incomes. The findings show that more than one-third of Eastern-born youth and one-eighth of Anglo-Western born youth were living in low income households. The table also shows that one-third of Anglo-Western born youth and one-tenth of Eastern-born youth were living in households with an annual income of greater than 70K. Figure 3 illustrates that Eastern born youth were disproportionately represented in the lower income categories, while Anglo-Western born youth occupied the higher income categories.

Figure 3: Household Income by Region of Birth

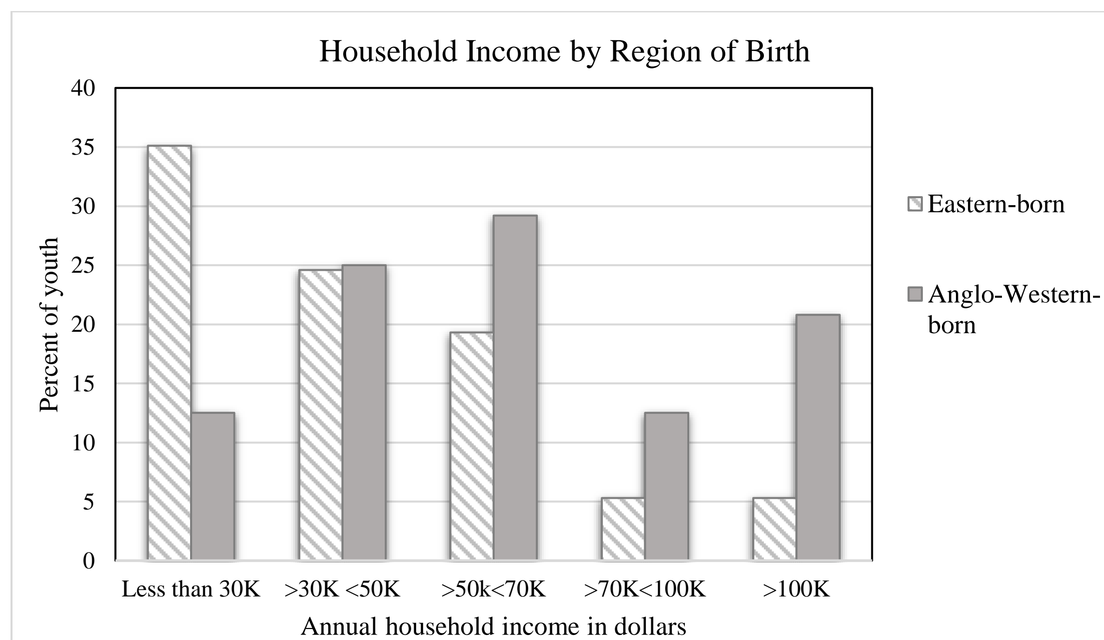
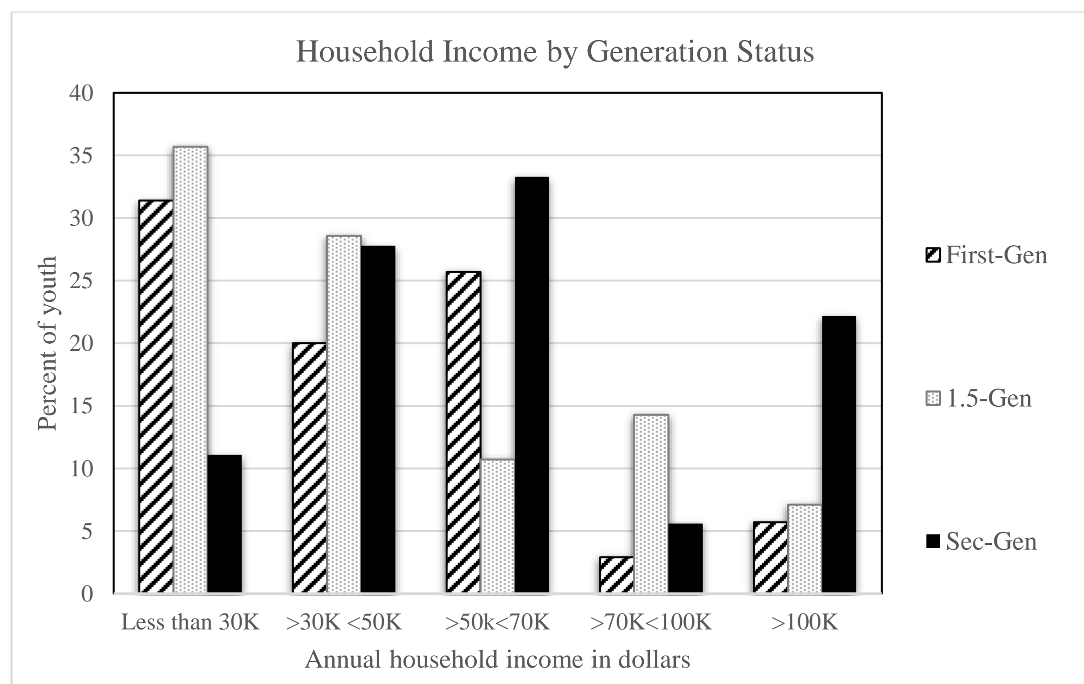


Table 5 shows the number and percentages of youth by generation status in low, middle, and high income households. Figure 4 illustrates the percentage of youth by generation status in

5 levels of household incomes. The table shows that approximately one-third of both first generation and 1.5 generation youth were living in low income households. Figure 4 further illuminates that first generation and 1.5 generation youth were disproportionately represented in the lower income categories, whereas greater proportion of second generation youth occupied the higher income categories.

Figure 4: Household Income by Generation Status



The findings can be interpreted as follows: in the sample youth born in Pakistan or Middle East were more likely to be living in low income households, while those born in Canada, USA or Australia were more likely to be living in higher income households. These findings are important from a mental health perspective, because low income status and prolonged poverty have a direct impact on mental health. Therefore, immigrant groups exposed to low income for longer periods may be at greater risk of increased distress and poor mental health.

4.3 Descriptive Statistics: *Health Composite* and Subcomponents

Table 6 presents the frequencies of physical health, mental health, social health and stress levels ratings on a 5-point Likert scale. Results show that out of every 10 youth six reported very good or excellent general health, but four youth reported good or excellent mental health. One-fourth of youth reported that emotional health affected their social activities moderately to very severely. One-third youth reported that most days were very stressful.

Table 6: Health and Well-Being Ratings

	Poor %	Fair %	Good %	Very good %	Excellent %
Self-rated health	3.7	6.1	29.3	37.8	22
Self-rated mental health	7.3	11	35.4	22	22
	Not all	Slightly	Moderately	Severely	Very severely
Emotional health affected social activities	22	52.4	17.1	6.1	1.2
	Not all	Slightly	Moderately	A lot	Extremely
Are most days stressful?	9.8	22	41.5	17.1	8.5

Tables 7 and 8 illustrate the means and SDs for the *Health Composite* measure and the health components broken down by gender**,** generation status and region of birth.

Table 7: **Mean and SD of Health Composite and Subitems by Gender and Region of Birth**

	Male *n* =30		Female *n* =51		Eastern born *n* =57		Anglo-Western born *n* =24	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Health Composite	**3.5**	**0.75**	**3.54**	**0.9**	**3.43**	**0.88**	**3.7**	**0.7**
Physical health	3.67	1.03	3.68	1.04	3.5	1	4	0.88
Mental Health	3.53	1.2	3.38	1.16	3.2	1.12	4	0.98
Social Health	3.87	0.9	3.92	0.85	3.84	0.94	4	0.66
Stress levels	2.97	0.96	3.16	1.13	3.161	0.98	2.88	1.26

Reference: *n* = sample size, *M* = mean, *SD* = standard deviation

The results in Table 7 show the *Health Composite* scores for male youth and female *youth* were similar. The mean scores for the individual subcomponent *mental health*, *physical health* and *social health* for both female and male youth were nearly equal. Canadian-born youth (represented by Anglo-Western born youth and second generation youth) scored highest on *Health Composite* and its subcomponents *physical health*, *mental health* and *social health*. It was also observed that mean *stress level* were highest (*M* = 3.4; *SD* = 0.95) among first generation youth (Pakistani born youth having immigrated after age 12 years) A higher score on stress represents more days were stressful, whereas a lower score meant less day were stressful.

Table 8: Mean and SD of Health Composite and Subitems by Generation Status

	Second generation *n* =18		1.5 generation *n* = 28		First generation n = 35	
	M	*SD*	*M*	*SD*	*M*	*SD*
Health Composite	**3.79**	**0.7**	**3.7**	**0.8**	**3.64**	**0.88**
Physical health	4.11	0.76	3.29	1.8	3.7	1.01
Mental Health	3.94	0.9	3.07	1.18	3.49	1.2
Social Health	4.06	0.64	3.7	0.8	3.94	1.0
Stress levels	3.11	1.23	2.64	0.99	3.4	0.95

Reference: *n* = Number, *M* = mean, *SD* = Standard deviation.

4.4 Intercorrelations of Individual Component of Health Composite

Table 9 illustrates the correlations between the *Health Composite* subcomponents physical health, mental health, social health, and stress level, were related to each other. Results showed that there was a positive relationship between physical health and mental health. A moderate positive relationship was also noted between physical health and social health, physical health and stress levels, mental heath and stress levels, and social health and stress levels. A high positive relationship was noted between mental health and social health.

Table 9: Intercorrelations Between Health Composite Subitems

Variables	Physical health	Mental health	Social health	Stress Most days
Physical health	1	0.763****	0.549****	0.342***
Mental health		1	0.683****	0.405****
Social health			1	0.562****
Stress most days				1

Correlation is significant at (2-tailed) *p = .05. **p = .01. ***p = .005. ****p < .001

4.5 Correlations: Health Composite, Ethnic Identity, Self-Esteem, and Resilience

Quantitative research question 1 asked whether a positive relationship between *Health Composite* and constructs of self-esteem, resilience and ethnic identity existed in my sample. Results are presented in Table 10. The findings echo evidence in the literature, that: 1) ethnic identity, self-esteem, and resilience are correlated across racial groups; 2) and higher levels of self-esteem, ethnic identity, and resilience are associated with higher *Health Composite* scores.

Table 10: Correlations Matrix: Health Composite, Resilience, Self-Esteem and Ethnic Identity

	Variable	1	2	3	4
1	Health Composite	1	0.548****	0.726****	0.553****
2	Resilience (CYRM)		1	0.540****	0.304***
3	Current Self-Esteem (CSE)			1	0.390****
4	Ethnic Identity (MEIM)				1

Correlation is significant at (1-tailed) *p = .05. **p = .01. ***p = .005. ****p < .001

4.6 Multiple Binary Logistic Regression

Table 11 shows the reference groups and dummy variables to compute the binary logistic regression analysis. In order to be able to make meaningful statements about the quality of health (such as poor health or good health) to address research question 2 and to confirm or reject the

associated research hypotheses 1, 2, 3 and 4, *Health Composite*[8] was categorized as *poor health* versus *good health* at a cut off value of 3. This is in line with Statistics Canada's (2020) cut off for self-rated mental health in which a rating of *poor, fair* and *good* mental health represent *poor mental health* (the reference category), while a rating of *very good* and *excellent* represent *good mental health* (the comparison group). The multiple binary logistic regression was conducted to address QUAN research question 2. In the model gender, household income, generation status and region of birth were entered together in step 1.

Table 11: Reference Groups and Dummy Variables for Predictor Variables

	Name of the categorical independent variable	**Type of variable**	**Number of categories**	**Reference groups**	**Dummy variables**
1	Gender	Nominal	*Two* Male Female	Female	Male
2	Household income	Ordinal	*Three* Low income < 30K Middle income >30K & <70K High income >70K	Low income < 30K	Middle income High income
3	Generation status	Nominal	*Three* Second generation 1.5 generation First generation	Second generation (Canadian-born)	1.5 generation First generation
4	Region of birth	Nominal	*Two* Anglo-Western born Eastern born	Anglo-Western born	Eastern born

Table 12 illustrates the results of the multiple logistic regression. There was no significant association between gender, income, region of birth, generation status and *Health*

[8] The *Health Composite* was calculated as the average score of four health items: health, mental health, social health and stress on the survey. These 4 health items were measured on a 5-point Likert scale (see details in Section 3.4.2).

Composite (χ^2 (6) = 9.87, $p < .130$). The-2 Log likelihood for the logistic regression model was 82.587 and the goodness-of-fit (Nagelkerke R^2) of the logistic model was 0.174. However, while holding all other variables constant a significant difference in *Health Composite* by household income in the predicted direction was found (F =3.951, p = 0.047). This was in line with hypothesis 4. The odds-ratio for an increase in good health (*Health Composite*) was 6.49 times (95% CI: 1.026, 41.013) for youth from higher income households (> 70K) compared to those in low income (reference group). The odds of good health for youth from middle income households was 3.11 times higher than that of youth from low income high households.

Table 12: Multiple Logistic Regression to Predict Health Composite

Step						95% CI	
1	Beta	SE	Wald (*F*)	Sig	Exp Beta (OR)	Lower	Upper
Gender 2 groups							
Female: ref grp							
Male	.390	.597	.427	.514	1.477	.458	4.765
Income 3 groups			5.642	.060			
Low income: ref grp							
Middle income	1.135	.585	3.756	.053	3.110	.987	9.795
High income	1.870	.941	3.951	.047*	6.488	1.026	41.013
Region of birth 2 groups							
Anglo-Western: ref grp							
Eastern born	.267	1.026	.068	.794	1.306	.175	9.761
Generation status 3 groups			1.437	.488			
Second generation: ref grp							
1.5 generation	-1.190	1.152	1.066	.302	.304	.032	2.912
First generation	-.745	1.259	.350	.554	.475	.040	5.598
Constant	.416	.798	.271	.603	1.515		

*Significance at 0.05 level

Contrary to my prediction in research hypothesis 1, the male youth in my sample did not have significantly better health than the female youth. The results did not support research

hypothesis 2 as the Eastern born youth did not have significantly better health than Anglo-Western born youth. Similarly, the findings did not support research hypothesis 3 as the first generation, 1.5 generation and second generation youth did not differ in health.

4.7 Descriptive Statistics: Ethnic Identity, Self-Esteem and Resilience

Figure 5 presents the findings to the open-ended question on the Ethnic Identity (MEIM) scale, which asked respondents "In terms of ethnic group, I consider myself to be ________." Youth could write in one or more ethnic group they associated with. Some examples of ethnic groups were also provided to help youth understand what the term ethnic identity meant. Responding youth identified as South Asian (*n* = 31), Pakistani (*n* = 14) and Brown (*n* = 8). Youth also identified as hyphenated identities such as Pakistani-Canadian-Muslim or Sunni-Muslim. These findings show that more youth identified themselves as South Asian than as Pakistani.

Figure 5: Ethnic Groups: Youth Self-Identification

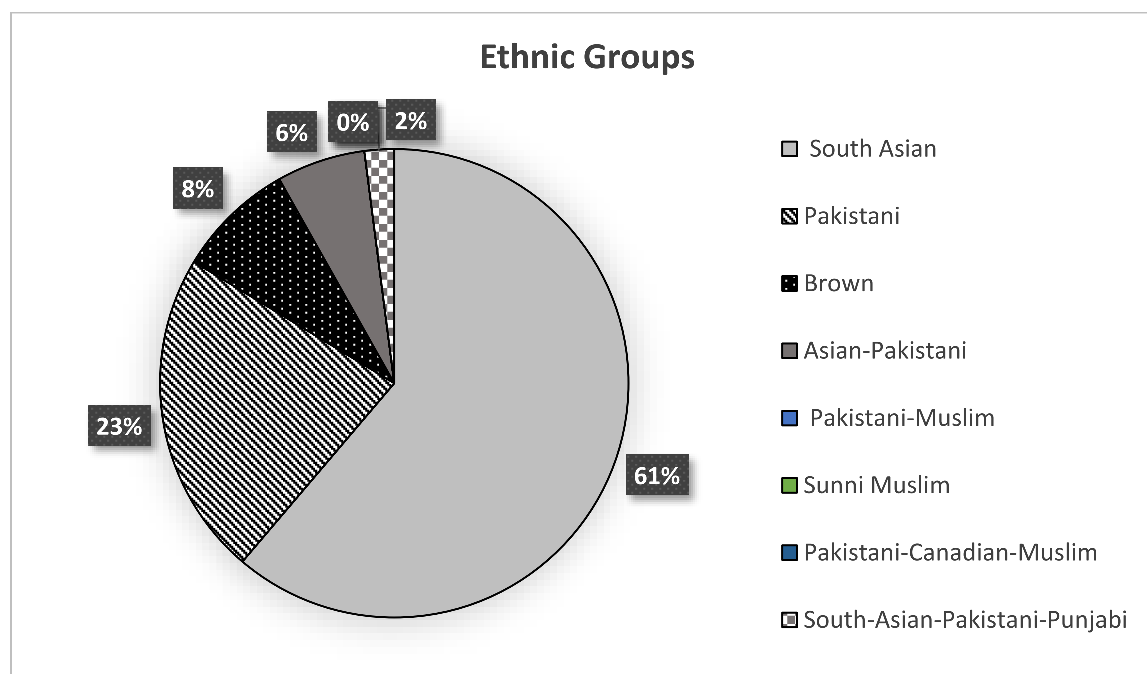


Table 13 illustrates the MEIM mean score of the overall sample in my study was *M* = 3.19; *SD* = 0.49. In a study examining ethnic identity among 5234 American high school students of diverse ethnic backgrounds the mean MEIM score of Pakistani Americans (*n* =155) reported was *M* =3.34 (*SD* = 0.48) (Roberts et al., 1999). The mean score on current self esteem (CSE) for the overall sample in my study was 6.9 (*SD* = 2.18). The CSE reported in a sample of adolescents of diverse backgrounds in Hamilton Ontario schools was 7.2 (Khanlou, 2004a). The resilience (CYRM-12) mean score in my sample was 51.6 (SD = 8.67), while the CYRM-12 mean score reported in a study on 1172 Turkish students from grade 9-12 was 46.27 (Arslan, 2019). Table 13 also illustrates there were no differences in the mean scores for self-esteem (CSE), resilience (CYRM) or ethnic identity (MEIM) between male and female youth, between Anglo-Western born youth and Eastern born youth nor between first generation, 1.5 generation and second generation youth.

Table 13: Mean and SDs of Self-Esteem, Resilience and Ethnic Identity

Group		Current Self-Esteem (CSE)	Resilience (CYRM)	Ethnic Identity (MEIM)	Subscale Ethnic Identity Search	Subscale Ethnic Identity Affirmation
	n	*M (SD)*	*M (SD)*	*M (SD)*	*M(SD)*	*M(SD)*
All youth	81	6.9 (2.18)	51.6 (8.67)	3.19 (.49)	3.07 (.54)	3.27 (.54)
Gender						
Male	30	7.0 (2.13)	51.7 (7.41)	3.17 (.54)	3.0 (.52)	3.27 (.60)
Female	52	6.84 (2.23)	51.5 (9.4)	3.20 (.46)	3.1 (.56)	3.28 (.51)
Region of birth						
Eastern born	57	6.46 (2.2)	50.8 (8.9)	3.13 (.47)	3.0 (5.4)	3.2 (.53)
Anglo-Western born	24	8.0 (1.76)	5.3 (8)	3.3 (.49)	3.2 (.52)	3.4 (.54)
Generation status						
First generation	35	6.9 (2.2)	51.2 (8.8)	3.1 (.49)	3.0 (.55)	3.3 (.52)
1.5 generation	28	6.3 (2.26)	50.5 (9.8)	3.1 (.47)	3.1 (.53)	3.1 (.54)
Second generation	18	7.89 (1.7)	53.9 (6.2)	3.4 (.46)	3.2 (.5)	3.5 (.53)

Reference: *n* = number, *M* = mean, *SD* =Standard deviation

4.8 Multiple Linear Regressions to Predict Self-Esteem, Ethnic Identity and Resilience

The designated reference groups for gender, region of birth, generation status and household income were selected as female, Anglo-Western born, second generation, and low income (see Table 11). All the predictor variables were entered in one step in the regression model. Table 14 illustrates the findings of the multiple linear regressions which answers research question 3. Gender, region of birth, generation status and household income altogether significantly predicted self-esteem (F = 2.507, p = .029), with an adjusted R^2 of .169. On closer examination of the individual betas in the model, none of the predictor variables contributed significantly in predicting self-esteem. Contrary to my research question 3 and hypotheses 1 and 4, there was no significant difference in self-esteem between male and female youth and no significant difference in self-esteem between youth by income.

Table 14: Multiple Linear Regression Predicting Self-Esteem

Step		Unstandardized B	SE	Standardized Beta	Sig	F	Sig	Adj R^2
1						**2.507**	**.029***	.169
	Constant	7.072	.672					
	Female: ref grp							
	Male	.039	.497	.009	.937			
	Anglo-Western: ref grp							
	Eastern born	-1.824	.950	-.384	.059			
	Second gen: ref grp							
	1.5 gen	.149	.994	.033	.881			
	First gen	1.080	1.090	.247	.325			
	Low income: ref grp							
	Middle income	.878	.528	.202	.101			
	High income	.968	.730	.169	.189			

*Significance at 0.05 level

Table 15 illustrates the results of the multiple linear regression for ethnic identity which address *research question 3 and hypotheses 2 and 4*. There was no significant association between predictor variables (gender, region of birth, generation status and household income) and ethnic identity in the sampled youth. The predictor variables in the model did not significantly predict ethnic identity together. Results relating to research hypotheses 2 and 4 found no significant difference in ethnic identity scores between male youth and female youth and no significant difference in ethnic identity between youth by income.

Table 15: Multiple Linear Regression Predicting Ethnic Identity

Step		Unstandardized B	SE	Standardized Beta	Sig	*F*	Sig	R^2
1						1.111	.365	.141
	Constant	3.314	.157					
	Female: ref grp							
	Male	-.039	.116	-.039	.740			
	Anglo-Western: ref grp							
	Eastern born	.062	.222	.059	.780			
	Second gen: ref grp							
	1.5 gen	-.331	.232	-.326	.158			
	First gen	-.265	.255	-.272	.302			
	Low income: ref grp							
	Middle income	.080	.123	.083	.520			
	High income	.216	.171	.169	.210			

*Significance at 0.05 level.

Table 16 illustrates the results of the multiple linear regression for outcome resilience which address the *research question 3 and hypotheses 3 and 4* found no significant association between the predictor variables in the model and resilience. Gender, region of birth, generation status and household income did not predict ethnic identity of the sampled youth in a significant way. Results pertaining to research hypotheses 3 and 4 found no significant difference in

resilience scores between male and female youth and no significant difference in youth by household income.

Table 16: Multiple Linear Regression Predicting Resilience

Step		Unstandardized B	SE	Standardized Beta	Sig	*F*	Sig	R^2
1						1.059	0.395	.079
	Constant	49.864	2.810					
	Female: ref grp							
	Male	.017	2.079	.001	.994			
	Anglo-Western: ref grp							
	Eastern born	.399	3.975	.021	.920			
	Second gen: ref grp							
	1.5 gen	-2.419	4.155	-.133	.562			
	First gen	-1.499	4.559	-.329	.743			
	Low income: ref grp							
	Middle income	4.357	2.210	.252	.052			
	High income	4.887	3.053	.214	.114			

*Significance at 0.05 level

Table 17 summarizes the research findings from the quantitative data. It shows which findings supported my research hypotheses and which supported the null hypothesis. Some of the findings in my study were in line with the literature, for example *Health Composite* and the constructs of self-esteem, resilience and ethnic identity in immigrant and Canadian-born Pakistani youth were positively correlated. A significant difference in *Health Composite* by household income was also found in the predicted direction.

Table 17: Results Supporting Research Hypotheses

Research question 1: Is there a positive relationship between *Health Composite* and the constructs of self-esteem, resilience and ethnic identity in immigrant and Canadian-born Pakistani youth?		
Hypothesis	Higher levels of self-esteem, resilience and ethnic identity will be correlated with better health	Supported
Research question 2: Is the health of youth (*Health Composite*) related to gender, region of birth, generation status, and household income?		
Hypotheses 1	Male youth will have overall better health than female youth	Null hypothesis
2	*Health Composite will vary by region of birth* Immigrant Pakistani youth will have overall better health than Canadian-born Pakistani youth	Null
3	*Health Composite will vary by generation status* First generation immigrant youth will have overall better health than 1.5 generation immigrant youth and second generation youth	Null
4	Immigrant youth from higher income households will have overall better health than immigrant youth from lower income households	Supported
Research question 3: Is there a difference in self-esteem, ethnic identity and resilience by gender, region of birth, generation status, and household income?		
Hypotheses 1	Male youth will have higher levels of *self-esteem* than female youth in my sample	Null
2	Female youth will have higher levels of *ethnic identity* than their male counterparts	Null
3	Male youth will have higher *resilience* scores than female youth	Null
4	Youth in the lower income bracket will have lower levels of self-esteem, ethnic identity and resilience	Null
Research question 4: Is there a relationship between household income and migration factors (i.e., generation status and region of birth)?		

	Immigrant Pakistani youth (Eastern born youth and first generation and 1.5 generation youth) compared to Canadian-born Pakistani youth (Anglo-Western born and second generation youth) will belong to lower income households	Supported

4.9 Qualitative Open-Ended Questions on the Survey

The following sections present findings from the open-ended questions on the survey, which include questions on the Current Self-Esteem scale and questions to gather information on treatment for mental health problems. The responses were content analyzed and themes and subthemes were identified.

4.9.1 Help or Treatment for Mental Health

The open-ended question on mental health treatment asked youth “Have you ever received any individual or group counselling or any other help at your school/college/university/clinic for concerns regarding your mental health?” The stem of the question explained to survey respondents what a mental health problem could look like for instance emotional problems, attention or behavioural problems, and use of alcohol or drugs.

Table 18 illustrates a summary of the youths’ responses to the open-ended question on mental health treatment. Approximately one third (32%) of survey respondents did not answer this question. The number of youths by gender and place of birth providing each type of response is also provided. Results show four out of ten youth had experienced some mental health issues in their life (such as feeling stressed, very anxious or depressed) and some mentioned seeking help for this, while others did not. Of the youth reporting having experienced a mental health problem over their lifetime 72% had been born in Pakistan.

Approximately 35% of female respondents and nearly a half of male respondents reported a mental health problem in the past or currently. Content analysis of the youths’

responses identified four main themes:1) the role of parent, teachers and friends; 2) stigma and shame; 3) healthcare and therapy; and, 4) exclusion and loneliness. These themes represent the mental health determining factors that influence immigrant and Canadian-born Pakistani youths' interaction with their support systems and mental healthcare system.

Table 18: Summary of Responses: Treatment for Mental Health Problems

	Description and Number of Respondents		
Summary of Responses	**Total** *n* = 81	**Gender** Female *n* = 51 Male *n* = 30	**Country of birth**
1. Experienced some mental health problems in life, and sought help	*n* = 32 (39.5%)	Female (18) Male (14)	Pakistan (23) Middle East (2) Canada (6) USA (1)
2. Never needed or received any treatment or help	23 (28.3%)	Female (17) Male (6)	Pakistan (13) Middle East (2) Canada (7) USA (1)
3. Did not answer the question	26 (32%)	Female (16) Male (10)	Pakistan (15) Middle East (2) Canada (5) USA (2) Australia (2)

Figure 6 illustrates the themes and subthemes identified from the responses. Box 1 represents examples of youths' responses that most strongly supported the theme "role of parents, friends and teachers." Similarly, Boxes 2, 3 and 4 represent some examples of responses that identified the other three themes (stigma and shame; healthcare and therapy; and exclusion and loneliness). Box 5 summarizes the type of treatment strategies youth with mental health problems sought. Some responses by the youth did not support the four main themes. For

example, youth mentioned that mental health was an invisible condition and that stress and anxiety increased when exam deadlines were near.

Figure 6: Factors Influencing Treatment for Mental Health Problems

Box 1: Theme: Role of Parents, Friends and Teachers

Examples of quotations

- I have social anxiety and social phobias (difficulty making friends)
- Opening up to parents was extremely hard
- I found support of my family and friends, school counsellors
- I received great help and support from my school counsellors and teachers
- One's parents themselves are stuck in a cycle of depression and continuous stress and are not getting help for it,
- Parents consider getting help for mental health as something lowly
- I feel, it is a selfish act to be complaining about your own problems, when parents are dealing with so much

Box 2: Theme: Stigma and Shame

Examples of quotations

- Stigma surrounds mental health in Pakistani community & culture
- Too much stigma in our culture
- Family would be out casted, made to feel ashamed
- If someone in the family has a mental health problem, parents standing (respect and status) in the community would be affected
- It can make parents ashamed in their Pakistani community

Box 3: Theme: Healthcare and Therapy

Examples

- Dissatisfaction with the healthcare system
- Help received was not conducive but was too sporadic
- It was not beneficial and was one of the reasons I discontinued the help
- Intake counselor did not seem to be attentive enough, not culturally sensitive
- No point in trying to get help, as physical exercise and being more social fixes depression

Box 4: Theme: Exclusion and Loneliness

Examples

- I would rather figure my problems myself
- I do not want to share my problems with others
- Trouble communicating in English
- Culture shock
- Feelings of isolation
- Not able to get a decent job and experience racial discrimination at work

Box 5: Treatment Strategies	Number of Youth Reporting this Information
• Did not receive the help needed, or were not satisfied with the care they received from school counsellors or psychiatrist	12
• Stigma prevented youth from seeking the help they needed for mental health issues	5
• Did not want to share their mental issues with others or did not have anyone they could seek sincere help from	6
• Received emotional help from family (most often), healthcare professionals and sometimes from friends	8

The following was observed about the small number of Canadian-born Pakistani youth who responded to the open-ended health question; two of them had experienced anxiety symptoms; three wrote that stigma was a barrier to them seeking mental health treatment; and two reported they needed therapy and counselling earlier in their life but didn't get that help until they enrolled in university.

4.9.2 Emerging Themes on Current Self-Esteem Scale (Open-Ended Questions)

My analysis for coding of themes and subthemes for the Current Self-Esteem was fully inductive. One of the open-ended questions on the Current Self-Esteem scale asked youth "What things make you feel good about yourself?" This question aimed to capture the elements that can promote self-esteem in immigrant and Canadian-born youth. The second open-ended question on the CSE scale asked, "What things made you feel bad about yourself?" This question helped to identify the factors which negatively impacted youths' self-esteem. Lastly youth were asked "What things can you do to feel good about yourself?" This question elicited suggestions from youth on ways to raise their self-esteem.

4.9.2.1 Positive Influences on Youth Self-Esteem

Table 19 illustrates the 8 themes identified through the responses to the question "What things make you feel good about yourself?"

Table 19: Current Self-Esteem Scale: Summary of Responses to Open-Ended Questions

Things that make you feel good	No*	Things that make you feel bad	No*	Things that CAN make you feel good	No*
Academics achievements & improved grades	19	Lack of motivation, stress, and depression	17	Recreation and selfcare	14
Family and friends	12	School stress	10	Improve work & study habits	12
Accomplishing tasks/skills or achievements	8	Lack of self-discipline & procrastination	8	Physical fitness; exercising & sports	9
Exercise and gym	6	Rejection	4	Socializing with friends and family	7
Spiritual connectedness, Islamic learning & praying	6	Socializing, shyness and relationship issues	3	Care of mental health, and stress	6
Recreation: food & music	6	Guilt: not giving enough time to family	3	Praying and fulfilling religious obligations	3
Self image or looks	3	Body image and excess weight	3	Helping others, doing good deeds	3
Quitting drugs	2	Anger issues	3		
		Financial stress	2		

* Number of youths reporting the activity

The theme *friends and family* highlight the important role of parent and friends towards elevating self-esteem in youth. Some examples of responses supporting this theme include: talking and going out with my family and friends, meeting new people; and seeing my parent's take great pride in me on receiving good grades.

The theme *accomplishing tasks, skills or achievements* contributed significantly to youths' wellbeing and raised their self-esteem. Some examples of responses that contributed to

this theme include: completing tasks on time; using my time constructively; and finishing tasks on time alleviated stress and anxiety. The theme *spiritual connectedness and Islamic learning & praying* reflects the importance of religion in the everyday life of immigrant Pakistani families. Religion was a remedy for stress management and mental ailments, to help cope with adversities (to be resilient) and to stay connected family and culture. Some examples of supporting responses are: waking up early in the morning and praying Salah; and reciting Quran makes me feel really good. Another key theme was *recreation, food and music* and the responses that favoured this theme are: exercise, gym and recreation; and spending time outdoors with friends and family make me feel good. The recreational activities that made youth feel good about themselves included walking, singing and listening to music.

4.9.2.2 Negative Influences on Youth Self-Esteem

The CSE question "What things that make you feel bad?" identified 9 themes. One of the dominant themes was *lack of motivation, stress and depression.* Youths' responses that supported this theme included phrases such as lack of goals and energy and doubts about the future. *School stress* was another dominant theme which youth mentioned was a cause of anxiety and made them *not feel good* about themselves and therefore lowered their self-esteem. Some examples that supported this theme are: not getting good enough grades, burden of studies, school responsibilities, lack of organization, putting off school workload, lack of attention and too much pressure at school. *Rejection* emerged as a theme which youth reported as: being rejected for jobs they thought they were eligible for and not being admitted to university programs they desired. The theme *Lack of self-discipline and procrastination* was a significant problem which youth struggled with. Some examples supporting this theme are: laziness, wasting time, leaving things unfinished, not getting the help and "not being able to achieve what

I want to in the time frame." The theme *financial stress* related to anxiety due to OSAP funding, tuition costs and transportation costs. Other themes included not *giving enough time to family*, *self-image/body image* (such as feeling less confident because of acne and skin texture) and *anger issue*. Direct quotes from a youth illustrate how his frustrations from life's uncertainties make him angry at others "realizing my insecurities manifesting in my thoughts and actions and affecting my self-esteem causes me great stress and I end up showing anger towards my friends and my family."

4.9.2.3 Things that CAN Lift Self-Esteem

The last CSE question asked respondents "What things can you do to feel good about yourself?" The theme "*recreation and self-care"* was the most popular remedy for happiness and contentment. The activities supporting this theme included: relaxing, watching movies and drama, singing, reading drawing, vacationing, dressing well, eating well and having a good nights' sleep. Some examples of the theme *improve work & study habits* included: focussing on learning, not wasting time and getting started early on tasks, keeping on top of schoolwork and stopping self from comparing to others. The theme *physical fitness, exercising & sports* highlighted the youths' confidence in exercise as a healthy option to improve wellbeing and ultimately raise one's self-esteem. *Socializing with family and friends* was an important theme which youth believed would bring them happiness and improved their self-worth. Youth also reported that taking *care of their mental health and stress* can make them feel good and promote their wellbeing. Some examples contributing to this theme were: coping with stress and academic challenges, focusing more on the positive aspects and practicing mindfulness. Other themes which reflected things that made youth happy and content included *praying and fulfilling religious obligations* and *helping others, doing good deeds.*

4.10 Chapter Summary

In Chapter four, the results of the QUAN arm are presented addressing the quantitative research questions and hypotheses. This includes findings from the survey responses of 81 youth presented in tables, text and figures. The results showed that more girls compared to boys and more Pakistani born immigrant youth compared to Canadian-born Pakistani youth participated in the study. A significant difference in household income by region of birth and migration status was also noted. A greater proportion of Pakistani born immigrant youth compared to Canadian-born Pakistani youth were living in low income households. Results showed that the four components of *Health Composite* (self-rated health and mental health, social health and stress levels) were positively correlated with each other.

The youths' responses to the open-ended health question revealed that parent, teachers, and friends played an important role in promoting mental health among immigrant Pakistani youth. However, other factors such as stigma and shame linked to mental health problems, attitude and behaviour of healthcare professionals and difficulty accessing mental health therapy, and systemic and social exclusion can become barriers to seeking mental health support and treatment. Findings showed that academic achievements, exercise and recreation and supportive family, teachers and friends facilitated youths' wellbeing and elevated their self-esteem.

Chapter 5: Qualitative Arm Study Results

In this chapter, I present the results of the qual arm of the study. First, I summarize the demographic characteristics of the participants which included youth, parents and service providers. Next, I present definitions of mental health as described by youth and parents. Then I discuss the factors that influence immigrant Pakistani youths' mental health. These factors are a collection of 13 themes identified through the interviews and focus group discussions with the participants and organized using a Systems Perspectives. Lastly, I describe the youths' and parents' personal experiences with mental illness and their challenges accessing mental healthcare. The participants mental healthcare needs and recommendations for improvement are also noted.

The discussion in this chapter is centered around the individual interviews and focus group discussions with youth and parents. The interview responses with service providers are also included. This chapter describes the participants' perceptions and captures their experiences which relate to the qualitative research questions of my study. These research questions are:

1) What are the perspectives and experiences of immigrant and Canadian-born Pakistani youth regarding mental health and mental illness?

2) What are the perspectives and experiences of immigrant Pakistani parents towards youths' mental health?

This chapter provides unique insights on immigrant Pakistani youths experiences regarding mental health[9]. To maintain the anonymity of the participants, the names of the participants in direct quotes are coded using letters and numbers. For example, a quote from a

[9] The voices of Canadian-born Pakistani youth could not be captured through the interviews due to recruitment challenges. This is further discussed in the limitations section.

male youth (M) from a focus group (FG) maybe presented as FG1M2. The code for female youth is F, mother is Mo, father is Fa and service provider is SP.

5.1 Characteristics of Participants

Table 20 illustrates the demographic characteristics of the youth, parents and service providers who took part in the interviews and the focus groups.

5.1.1 Youth

An equal number of male and female youth participated in the interviews, whereas more female youth participated in the focus groups compared to male youth. The average age of youth was 21.6 years. The age at migration ranged from 2 to 22 years. Among the youth interviewed five were attending high school, 18 were enrolled in post-secondary institutions in the GTA and three were working or waiting to continue their education. The fields of study of the post-secondary students included computer science, business and commerce, psychology, sociology, early childhood education, paralegal studies, design and art and medicine.

Six youth reported their mothers had a career before migrating to Canada, these included: teaching, social scientist, textile designer and a medical doctor. These mothers after migrating to Canada also held jobs in Canada. Their current occupations included: tax accountant, physician assistant, teachers, and social worker. The youths' mothers who were housewives in Pakistan or Saudi Arabia continued to be housewives in Pakistan except for two mothers.

The youth reported their fathers' professions as: engineers (five fathers), pharmacists (five fathers), lawyers (two fathers), businessman, an accountant, an ex-army personnel, a teacher, a doctor and a bureaucrat. After migrating to Canada, the youths' fathers transitioned to occupations such as; taxi drivers, and truck drivers, construction worker, schoolteacher, mechanical engineer, real estate agents, electrician, handyman and self-employment. A couple of

youth reported that their fathers were unemployed, and seven youth did not share their fathers' current occupation.

Table 20*: Demographics Characteristics of Individual Interview and FGD Participants*

	Gender		**Age (average)**	**Age at migration (average)**	**Country of birth**		
	Female	**Male**	**Years**	**Years**	**Pakistan**	**India**	**Saudi Arabia**
Youth	14	12	21.6	10.8	24	0	2
Parents	15	1	46.1	36.4	15	1	0
Service providers	0	2	41	34.5	1	1	0

5.1.2 Parents and Service Providers

The highest level of education of participating **mothers** ranged from grade eight to a graduate degree. Most of the mothers were housewives but a handful were employed as a receptionist, office administrator, elementary teacher, arts and craft teacher and a bus driver. The only participating **father** was a recent immigrant who had been in Canada for less than two years and was unemployed at the time of the interview.

The two male **service providers (SPs)** interviewed were South Asians with a master's degree in social work. Both had several years of experience working with immigrant youth. Both were able to effectively communicate with new South Asian immigrants in English, Urdu and Hindi.[10] Both assisted newcomers in accessing essential immigration and settlement services, including searching for employment, becoming employable and seeking housing. Both SPs were working with reputable immigrant serving agencies in the Greater Toronto Area. One of them

[10] Both Urdu and Hindi languages have many similarities, for example they share the same vocabulary. However, Urdu is spoken in Pakistan and written in Perso-Arabic script while Hindi is spoken in India and written in Devanagari Script.

was responsible for supervising an after school drop-in program for new newcomer[11] youth between 12-22 years of age. About 10 newcomer Pakistani youths were enrolled in this program. The newcomer youth had access to computers and internet to help them complete homework, to check and respond to personal emails and to learn how to engage in social media. The youth also engaged in indoor games and discussions which focussed on: improving English speaking; socializing with other youth in the program; and learning about Canadian culture. The program outdoor activities included sports, games and city tours. Service provider also assisted newcomer immigrant families in applying for health cards, driver's licence, educational degree evaluations, professional licencing, job search and accessing housing and social services. Many clients were immigrant families from Pakistan. The SPs shared their experiences serving immigrant youth and their families.

5.2 Youth and Parents' Definition of Mental Health

This section addresses the qualitative research question "What are the perspectives of immigrant and Canadian-born Pakistani youth towards mental health and mental illness?" Youth provided a range of definitions for mental health (theme one). Generally, the responses of male and female youth on definition of mental health did not differ. One youth who had a diagnosis of major depression described depression as*: "It is like staring at drying paint, there's no excitement no emotion, you're just sitting there."* (FG2M3). Some youth viewed mental health as a strength-based concept: the ability of an individual to manage/control negative emotions such as anger and jealousy. While others connected mental health to positive emotions and feelings of peace and calm. Table 21 illustrates the definitions of mental health (theme one) categorized under five subthemes:

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[11] A newcomer was a refugee status or permanent resident who had been in Canada for less than 5 years

Table 21: How Youths and Parents Defined Mental Health

No.	Definitions of Mental Health	Description
1	Mental health is a holistic spiritual concept	- Physical health, emotional health and spiritual wellbeing
2	Balancing strengths and weaknesses	- Balance between two opposing forces
3	Ability to cope	- Overcome stress and move on with life
4	Attaining and sustaining relationships	- Emotional support from family and friends
5	Peaceful home	- Harmony and cordial relationship between family members

1. *Mental health is a holistic spiritual concept*. Youth described mental health as a holistic concept that included physical health, emotional health and spiritual wellbeing. Some youth described it as an invisible state of the mind. As one youth explained "*a person who has depression or anxiety can appear very normal as his/her/their mental illness may not be noticed, it is invisible to the eye*."

2. *Balancing strengths and weaknesses*. For some youth, mental health was an individual's ability to strike a balance between two opposing forces: an individual's strengths and weaknesses; or positive emptions versus negative emotions. Youth explained that good mental health was achieved by keeping away from bad company and unhealthy behaviours. One youth (M4), who had come to Canada when he was a toddler said: "*That's what I think good mental health is, I think the best things for mental health are that you have the right direction in life. You are associating with the right people you are staying away from the wrong ones*." Youth believed that mental health was a positive concept and described it in various ways: thinking positively, acting positively and feeling good about oneself. Another youth (F3) felt that mental health varied over time. He said, "*there will be times when you are sad, and you have bad days, but the good days eventually outweigh the bad days."* Other definitions of mental health offered by the youth were: being content with yourself; the absence of negative experiences; and being stress free. One youth (M3) remarked: "*Good mental health? Say contentment, calm*

peacefulness resilience being able to deal with stress being optimistic." Some youth believed mental health was the ability to manage negative emotions such as, anger, jealousy and hatred towards oneself and others.

3. *Ability to cope*. Mental health was described as a strength-based concept. It was the ability to cope with difficult situations, deal with stress and the capacity to move on in life despite the hardships. Youth believed mental health embodied self-control. In this context one youth (F4) remarked: "*Sometimes different things will upset you.. being able to operate and function normally, we cannot let that side of us way down."* Another youth (*FG2M2)* described it as*: "Being mentally strong, feeling confident to do whatever you want to do, and nothing should stop you"* Another youth remarked that everyone has their share of problems and everyone experiences stress in different forms and shapes. She further explained: "*For students it might be low marks and social life, for adults it would be loans and jobs. People need to learn, how to cope with it."*

4. *Attaining and sustaining relationships*. Both parents and youth believed that good mental health developed from bonding and human relationships. Strong family bonding and a safe and secure environment promoted good mental health. Most parents and youth agreed that a supportive family helped to mitigate stress and to enhance youths' psychological well-being; parents who were responsive and sensitive and actually "listened." A male youth explained that:

> I think the environment is very important for good mental health…for example family relations, the environment of your house, how parents are interacting with each other, how siblings interact with each other, the overall atmosphere of your home… because the home is the place where you are spending most of your time so if that's good then your mental health will definitely be good. (M2).

Healthy relationships not only provided emotional support, but in certain circumstances were also a source for economic support. Good mental health was achieved through; a supportive and loving family; a closed circle of sincere, and reliable friends; and a wider social circle of friends; associating with positive minded people; and supportive teachers and counsellors who were genuinely concerned about youths' grades and checked on them to see how they were doing.

5. *Peaceful home*. Both parents and youth believed a stable and peaceful home environment was prerequisite for good mental health. As no home can exist without some noise, participants believed that when family disputes were timely resolved without escalation into bigger issues, then families wouldn't break up. Harmony and cordial relationship between family members (parents and siblings) promoted mental peace or "sakoon." Many parents' believed that an ideal home which nurtures good mental health, is one that is trouble-free, in which their teens and young adults are not bringing trouble home, not adding problems to their day to day worries. Parents (mothers) said that they had peace of mind "sakoon" (or mental health) when their children were safe and well provided.

5.3 Factors That Influence Immigrant Pakistani Youths' Mental Health

The qualitative descriptive analysis of youths', parents' and service providers' individual interviews and focus groups identified 11 novel themes/factors influencing immigrant Pakistani youths' mental health. There many different ways to conceptualize social systems that influence individuals. Bronfenbrenner's Socioecological Systems Framework provides an "ecological perspective useful in categorizing systemic influences" on individuals (Durlak et al., 2007, p. 271). I applied the Systems Framework to understand and organize the different interacting systemic and environmental influences on immigrant Pakistani youths' mental health, such as

family (and relatives), school, neighbourhood and religious institutions. Table 22 illustrates the 11 factors (theme 2-12) organized from a Systems Perspective. The themes are described in the following sections.

Table 22: Factors Influencing the Mental Health of Immigrant Pakistani Youth

No.	Micro-Level Themes	Meso-Level Themes	Macro-Level Themes
1.	Resilience	Parents, and Intergenerational Conflict	Parents' Settlement Struggles and Survival Employment
2.	Identity and Acculturation Stress	Peer-Victimization and Bullying: Terrorist or Muslim?	Financial Difficulties and Impact on Mental Health
3.	Academic Expectations and Stress		Discrimination: Race, Religion and Accents
4.	Role of Religion in Coping with Stress		Stigma or Ignorance?
5.			Social Exclusion

The youths' narratives revealed the factors that shaped their mental health. How youth identified themselves (Muslim, South Asian, Brown, immigrant, socioeconomic status, Pakistani and female), and how they interacted with their environment was critical to their mental health. The factors influenced youths' mental health directly and indirectly by either lowering their mental health (by increasing stress levels) or improving their mental health (e.g., through increased access to resources and social supports). Parents were also asked to identify factors that triggered mental health problems in young people. They noted that **family problems** (such as lack of attention from parents, negative attitude of parents towards each other and to their kids, lack of marital harmony between parents) and **school problems** (such as poor relationship with peers and teachers, bullying and youths' failure to attain their academic goals) were the two most influential factors that shaped youths' mental health.

5.3.1 Micro-Level Factors

In this section the factors that influenced immigrant Pakistani youths' mental health at the micro-level (the individual, family, school and neighbourhood) are discussed.

5.3.1.1 Resilience.

This section describes the resiliency of immigrant and Canadian-born Pakistani youth in the context of migration and settlement, including overcoming mental health challenges and academic challenges. The youth reported the duality of their home and school, which were sources of stress but also shelters that protected and supported them through life's challenges. Almost all youth consistently spoke about stress in their life which increased anxiety and made them feel depressed. They learnt to cope with their day to day stress by setting goals, being mindful, saying their prayers and using the support from family, relatives and health professionals. One male participant (M4) said: "*I know for a fact that we're all immigrants and we all came from a different country but at the end of the day it's all about where do you see yourself and how do you want to get there".*

Several youths believed that the problems they encountered could be resolved if they set their mind on overcoming them. One female youth (F3) said that "*whatever mental health condition one has, they [the individual] need to learn how to cope with it personally*". Another male youth (M4) explained how he was able to cope with academic stress, he said: "*I would say it is due to the closeness with my parents I share with them, and my friends too.*" A participant (M3) explained how he dealt with his struggles: *"I try to set goals for myself, I try to exercise, stay physically fit. Pursuing your goals, keeping your positive mindset, meditating, praying, eating healthy, just being positive and you know and having conviction."* A female youth who had struggled with depression for several years explained how her family doctor helped her to

cope with her illness and stress resulting from strained family relations. The youth (F3) said*:* "*It helps knowing that you know someone who understands what I'm going through, and not judging me for it, and I'm not alone, and just that is half the battle right there.*" As new immigrants, social and community support for some youth and their families came from their relatives in Canada, who gave them a place to live (by sharing their homes), sometimes for extended periods, till their fathers found employment and were able to afford a place of their own. Findings from my research support the literature on promoting resilience among youth (Dolan & McGrath, 2006), racialized youth (Miller & MacIntosh, 1999) and migrant youth (Pickern, 2014). The youth achieved and developed resilience through multiple levels of the system represented in the socioecological model. Resilience emerged as a personal strength in youth. It was established through positive relationships with parents, close relatives, peers and teachers. Availability of social or community supports further contributed in establishing resilience in this age group.

5.3.1.2 Identity and Acculturation Stress.

Immigration, whatever the reason for the movement, is a difficult and complicated process, more so for individuals migrating to a country with significant differences in cultural values and language. The distinction between Western and non-Western culture is embodied in traditions, customs, languages, behavior, ethical standards, moral principles and approaches to problem solving (Al Wekhian, 2016). All immigrant Pakistani youth discussed their challenges as they navigated between their conservative heritage culture and modern mainstream culture. They talked about the acculturative stress, cultural identity confusion, and tension between parent-child relationship (discussed in a later section). In the context of cultural identity about herself, one female participant said:

> I still struggle everyday not being able to separate my Pakistani self from my Canadian self… I came here I was very young age my siblings were much older than me. I identify as a Canadian, but my brothers they identify way more as Pakistani than as I do because they were raised in that culture and I was raised partly in this culture and partly in that. I can't say I'm Pakistani or I'm Canadian because I'm not either I'm a little bit of both (F3).

One female participant described Pakistani youths' struggles as an identity crisis, she said:

> At least 50% of students at my school were Pakistani and Indian because the neighborhood had a lot of South Asians. Growing up I could see that a lot of students I knew went through some kind of a cultural identity crisis and they were to some degree depressed. A lot of it started from the fact that they wanted to act a certain way dictated by the culture of Western Canadian Society, but their parents were trying to preserve the Pakistani culture, heritage and values that they grew up with. A lot of youth I know actually ran away from home…. some resorted to drinking or doing drugs that got them kicked out of school or some got into fights and got put into jail. They could not reconcile their Pakistani culture with the Canadian culture. (F4).

Most mothers were concerned about the psychological impact of exposure to two opposite cultures on their children everyday. The youth identified as Muslim and Pakistani but also wanted to be accepted as a Canadian in the society around them. Many mothers expressed their concerns that immigrant Pakistani youth may feel confused and lost. In the context of acculturative stress, one mother said:

> I think Pakistani kids here are passengers in two boats, outside the home they see different things and when they come home, they see a different culture. In dealing with

two cultures simultaneously, the youth are perhaps struggling with their identity, am I Pakistani or am I Canadian?" (FG2Mo1).

Often youth were able to find a middle ground between two dissimilar cultures, there were some youth who were fearful that adhering to their culture too closely in a visible way was problematic. One female youth feared the conservative dress she donned (head covering, loose covered garments) would become a barrier in her career growth, she may not be able to reach her full potential.

Majority of newcomer Pakistani parents feared their adolescent and adult children might abandon their heritage culture and religious values and adopt Western beliefs and values. These views were voiced by service provider one, who also added that as Western ideals related to individualism focussing on building self-esteem and self-actualization, these ideals were at odds with Pakistani culture and Muslim religion which related to collectivism and emphasized community-actualization, interdependence, extended family system and self-regulation. Parents explained that their restrictions on their children, may appear as conservative to people in the West, but were only to protect their children from indulging in social behaviours that were harmful for the youth, and to keep their family together. In this context one immigrant father said:

> I tell them to keep your self safe from these things. Many families we see, the mother is working full time and so is the father, then there is no check and balance on the girl and boys. Then the home gets destroyed. A mother's role is most important to control their children, so they do not indulge in wrong things. They should learn to live together like a normal family, and not just think about themselves and move out… There should be head

> of the family that guides the children. They should understand that parents have a respected place in their family and in our society and they should honour that. (Fa1).

A male youth (M4) explained why Pakistani youth experienced difficulty adapting to Western culture: "*Pakistani people are a bit different, they are restricted that does apply some pressure on a person*." In contrast, a female youth said she did not feel pressure to abandon her cultural heritage. She said:

> I've never felt like I've had to pick one culture and I've never felt pressured by either side but yes, when I'm home my parents want me to do things a certain way and see things a certain way and I think I've always just accepted it because I understood that, of course that's how my parents grew up, this is why they do things a certain way. (FG3F4).

The Muslim beliefs, values and practices which are embedded in Pakistani culture, promote segregation of genders and discourages free mixing of teenage and adult males and females. One working mother was concerned about Pakistani families socializing within their own ethnic community, and gender segregation within the Pakistani community. She said:

> We tell our kids that you are a Pakistani and you must only closely associate with Pakistani people, but they will be growing up with a diverse community. We segregate them. We are not doing good to the children, especially those people who admit their children to Islamic schools. Boys are told that they should not associate with girls. I think this… adds to the challenges for children at school. (FG1Mo4).

Many youths who felt that the problem did not lie in Pakistani youth but in others who did not understand their Muslim values and culture. One male youth was dismayed about how others were quick to make comments and judge him. He said:

> I gave my Instagram, profile to one of them, and he was like bro you only follow guys are you gay or something! And I'm like no… I only know guys… how would I know girls? The only females I have talked to are my mom, probably a teacher I had in a grade nine, and my cousins and my sisters and obviously and that's it. (FG3M1).

Parents also expressed serious concerns about social media, digital technology and the internet. They believed young people were being exposed and at heightened risk of consuming harmful content, thoughts and believes through this media. Talking about the misuse of digital technology, a father said:

> I keep telling my kids, regarding Facebook, mobile and it all depends on how you use it. If you are going to use to watch bad things, then your mind will get bad, these things have a negative effect on you. But if you use it positively then its okay. (Father).

Interviews with parents and youth showed both generations had different perspectives on mainstream culture and how they wanted to engage with it, yet some views were also similar. Several youths expressed a strong desire to identify with the Canadian culture but also wanted to retain their heritage culture.

5.3.1.3 Academic Expectations and Stress

The participating newcomer youth who had arrived with high school credits from Pakistan or were transitioning from Pakistani educational system to Canadian educational system described the process as challenging and very stressful. Some said they had difficulty with application forms and navigating bureaucratic obstacles. They felt that they did not receive clear instructions nor the support to transition from one educational system to the other. Some were required to complete additional credits in order to equivalize their high school diplomas. Youth were eager to pursue higher education and apply for their first job in Canada. Youth had

expected that the diploma/degree evaluation process and transitioning from one educational system to another would have been more rapid, thus the long wait was frustrating for many. Recently migrated youth were eager to take up part time student jobs (to support their education and their families), but employment agencies and businesses would not hire them without a Canadian job experience.

All youth in my study told that their parents had high academic expectations from them. Many youth felt it was their responsibility and obligation to meet their parents' aspirations. Not all youth felt this way. One youth said:

> I had an 87, it was my toughest course, I thought I was doing really good, then they [parents] told me you have an '80' in it, this isn't even good. But they don't even know the class I go to it's pretty hard and they don't even understand these marks and they're just like you need to do better instead of encouragement. (FG3M1).

Li and colleagues note that lack of student success in Asian cultures was equated to shame, and lack of worth and heightened vulnerabilities to stress, and anxiety and mental illness which further had a negative impact on student success (Li, Tse, & Chong, 2014). For most youth, pursuing their educational goals was a source of a lot of stress. Stress levels increased close to exam deadlines. Youth spoke about being overwhelmed with the course load and course expectations. The academic stress brought anxiety and made them feel depressed.

At least a quarter youth disliked that their parents constantly compared them to other students or youth who performed better in academics. In this context FG3M1 remarked: "*Why did that kid get a 90 that's how brown parents go…. Why did he get a 90 and you got a 70 or 60?"* The youth rationalized that typical Brown (South Asian) parents held high academic

expectations from their children, with a focus on STEM fields. One female youth was under constant pressure to perform better, she said**:**

> It depends on your parents… like in chemistry I had 87, but in biology I got something like 76. But my dad was like 'you have to become a doctor.' I already know that class is very important to my career! I'm good in chemistry but bad in bio. (FG2F1).

Several youths felt that South Asian parents chose specific career paths for their children, which may not be the best fit for their child's abilities and interests. One youth said: "*Even if youth really work hard, it's just not what they want to do*." Another youth (FG2M3) added: *"A lot of my friends were pressured to go into engineering and they hated maths."* On this topic another male youth commented:

> A lot of Pakistani parents force their kids into engineering or to become doctors or what the children may not want to do…because there is a lot of course load, they [youth] realize that they might not make it to what their parents want them to accomplish. I think that this causes a lot of depression in Pakistani or Indian people because their parents usually expect them to do that. (FG2M3).

During the discussions, some youth confided that they desired to fulfil their obligation towards their parents' academic expectations but sometimes they silently rebelled against those expectations. One male youth (FG2M3) remarked*: "When kids begin to have their own say and then that causes conflict, but I think they usually end up going with what their parents say but inside they are rebelling to a certain point."*

5.3.1.4 Role of Religion in Coping with Stress.

Almost all participating youth discussed that religion was central to the life of Pakistani life. When youth spoke to their parents about feeling stressed or depressed, some parents related

the mental health issues to weakness in their faith, and some suggested their children seek spiritual support through “salah” (prayers) and reading the Quran. One male youth (FG3M1) said a close associate advised him to seek support through prayer, to deal with his stressful problem: *“He said, don't worry about it. That's the thing here, you have to pray 5 times a day in the mosque as a man.”* Some youth did not agree with their parents’ advice that prayers were the ultimate solution, and they suggested that other practical approaches were needed. One female participant (FG2F2) remarked: *Once I was really depressed my mom just told me "Namaz Paroh" (say your prayers) and I said I do that already, there still is a chemical imbalance no matter how many times I pray you know.”* Another female youth (FG2F1) added*: “They judge you, that you don't have any attachment to your religion that's why you are feeling depressed.”*

Youth who believed in the power of prayer, confirmed to the others that prayer helped them if done to really connect to Allah and not as a routine religious ritual. One youth offered advice to the others on how others could reap the true benefits of prayers in mitigating stress and depression:

> Namaz and Quran as a means to cleaning your heart and mind you know talking to God and using him as a person to talk to and what I mean by this is that you talk to him but you don't get any answer back because that's not how it works……it is hard it takes time but you’ll actually find some problems get solved through that kind of message. (FG2M2).

Despite the different opinions, several of the youth drew support from prayer and spiritual connectedness in alleviating stress and mental health problems. Reading the holy book Quran helped one youth deal with his problems. He said: *“It makes me feel better, it gave a sense of direction, it clears my mind, so I am able to focus on the positives rather than the negatives.”*

Another youth mentioned how spending more time at the mosque and talking to others like himself helped. He said:

> Going a little bit more to the mosque now. I meet people who kind of help me out a lot just because they have been through the experience too. A lot of people that come there have issues. I met a few people that kind of understood where I was coming from like as if it's my family. (FG2M2).

A few youths also suggested other methods to deal with depression or anger. They would go for a long run, take up exercising, play cricket and in this way take their frustration and anger out on the cricket ball.

5.3.2 Meso-Level Factors

Mesosystem factors include social interactions that occur between two factors in the microsystem settings. It can include the interaction between family experiences and school experiences or the interaction between the youths' parents and the community settings (Christensen, 2010; Neal & Neal, 2013). For example, it can be youths' experiences at school or in the society outside their homes linked to their relationship with their parents.

5.3.2.1 Parents, and Intergenerational Conflict.

Immigrant children acculturate at a faster pace to the host culture than their parents who tend to retain aspects of their heritage culture. As more years are spent in the host country the "acculturation gap" in immigrant families increases leading to inter-generational conflicts (Birman, 2006). As suggested in the literature the youth in my study raised the issue that many aspects of their life differed from their parents. Many youth felt that it was difficult to share their personal problems with their parents as they would not understand, for example one youth remarked:

> Some kids have a great relationship with their parents, they share a lot of things. I feel like in Pakistani immigrant context that's not true you don't really have that kind of relationship with your parents you can't really talk to them about some things you know…. they won't really…. again, they won't really acknowledge it, you know they'll just brush you it off and just tell you to focus on studies and that's it. (M3).

One youth remarked about immigrant Pakistani fathers as follows:

> A lot of people's fathers have worked very hard and they have a really 'no nonsense' approach to things. Life is really simple to them, you have to do this, this and this, you have to study, you have to work like you know what I mean everything else is just irrelevant. (M3).

Most youth felt that Pakistani parents were not prepared to deal with the issues that immigrant Pakistani youth go through growing up in the Western society. Some youth were of the opinion that immigrant Pakistani parents weren't prepared well enough to raise their children in Western society. One male participant said:

> I feel like when people come here from Pakistan they do not realise how much effort they have to put into raising their kids properly and what they are going to be facing when they go outside of home, because they [parents] have a different perception of what goes on outside because of the way they [parents] have grown up. (M3).

Relative to what youth believed parents did not express such a mindset. One mother (Mo1) said that she as a parent did not believe in the use of force and compulsion to discipline her children. She and her one teenage and two adult daughters were like friends. Generally, there was no trouble in raising her children. But occasionally, her daughters would get stubborn on some issues, the parents did not agree on. Parents' said their restrictions and discipline was

mostly protective and good intentioned. However, the youth interpreted it a different way. They felt that parents did not trust them. Parents questioned them too much, did not believe the youth were telling the truth and were often suspicious of their activities. Some youth shared that their fathers had this notion that their young adults were smoking, doing drugs, drinking alcohol or dating. One girl (FG3F3) protested: *Other kids do drugs and they are like really bad kids and we're not like that and they should be grateful for that*." On this note another male youth added**:**

> Most of my friends smoke. My dad thinks I smoke too….He says, 'one day I'm going to catch you smoking' and I tell him I'll come clean. I just don't smoke seriously. They just believe things they don't even investigate. (FG3M1**).**

The female youth had additional woes, they felt they had to follow (or were expected to follow) certain cultural values and norms that their family and their Pakistani community imposed on them. For example, covering their head in public, not being able to go out with friends or to dinner with coworkers (or being cross examined for wanting to do so) and arranged marriages.

Some mothers in the focus group said that they would not permit their teenage daughter to go to their friend's place without gathering sufficient information about the people and the event. Most mothers were aware that the restrictions imposed on their teenage children upset them, but these strategies were in place to maintain religious modesty and protect them from bad company and social ills.

Some youth said they would not talk about personal issues with parents, they would rather share them with their sibling. One youth (F3) said: *"No I just share my problems with my brother, a little bit not too much with my parents because I feel like me sharing too much with them it's more hurtful to them than beneficial."* Another youth told others that she often

concealed her day to day problems from parents. She (FG3F2) explained why: *"I do hide a lot of things from my parents. I think its because it is better not to tell them, which may make the case worse. I just don't tell them and try to resolve the problem myself."* One male youth said he would not tell his mother the truth when she asked questions because he felt she would not understand where he was going or what he was going to do and it would take him hours explaining this to her. Nevertheless, some female youth had a different viewpoint. They said that they told their mother everything. They shared that communication was the key to understanding each other (parents and children) and solving issues. One female youth explained how good communication with her mother helped her. "*My mom forced me to wear a scarf, but I had to go talk to her about the things that happened to me, and I tried to make her understand that sometimes it's good and sometimes it's bad*." (FG3F2).

One female youth said that, since they had first arrived in Canada her parents had changed a lot over the past several years and were now more accepting of certain Western cultural practices than they were before. Majority of parents also explained it was challenging for them to maintain Pakistani Muslim values in their children, who were socializing and learning from the world outside their homes. They felt that the acculturation gap was a source of conflict in their parent-child relationship. Mothers suggested that communication was key to successful parent-child relationship and building a relationship of trust with children, particularly teens. A healthy parent-child relationship promoted positive mental health in parents and their children.

5.3.2.2 Peer-Victimization and Bullying: Terrorist or Muslim?

In this theme bullying includes religious discrimination youth experienced from their peers at school. Most participating youth had experienced bullying at school when they were younger or were recent immigrants in Canada. One female participant, whose family had fled the

USA when discrimination of Muslims accelerated following the September 2001 terrorist attacks on the World Trade Center, said she would generally hide her Pakistani identity at school, because she felt others did not have a good image of Pakistani people. She (F1) said: *"You can be bullied in school for being, you know from a different country like Pakistan. I feel ashamed that I have to tell people that 'I'm a Pakistani."* Other youth confirmed that subtle forms of ethnic bullying existed in their school. Al Wekhian (Al Wekhian, 2016) notes that in these times it is difficult to use the label of "Muslim" without the term being linked to terrorists or Islamic extremists.

A focus group participant described a school situation which was a very traumatic and was a life changing event. She was a grade eight student, when there was the news about a terrorist attack by a Muslim group, and her peers picked on her for being responsible for it, she said:

> I was the only Muslim girl that wore a hijab. The Muslim boys you can't really tell if they are Indian, or where they are from because of their skin tone. So, they chose to pick on me and started this whole thing, put me in the corner and said that people like me shouldn't be doing this. They said that "we hear that people like you want us all dead". I'm 13 like what do you do? that's one of the most traumatic experiences of my life. (FG2F2).

Several youths remembered experiences from school, when their peers joked about the Muslim religion and picked to bully children who expressed affiliation with the Muslim religion. One participant described how students in his class associated terrorism with the Muslim religion: "*One student would shout out loud "Allah-hu-Akbar"*[12] *to poke fun at Muslims in class,*

[12] Arabic phrase meaning that Allah is the great. Lately, the phrase has also been associated to terrorist acts by Muslims

and the rest of the students would laugh out loudly." This act belittled and ridiculed the Muslim students in the class.

Service provider one observed that new immigrant Pakistani youth were shy, and hesitant to introduce themselves as immigrants from Pakistan. He believed Pakistani newcomer youth were consciously afraid of being stereotyped as terrorists. He said: "*Some of them [immigrant Pakistani youth] are thinking that we are from Muslim country, of Muslim origin, which is related to terrorism."*

The consequences of bullying can be psychological such as lowering of self-esteem, anxiety, depression, and avoidance behavior (Esbensen & Carson, 2009), and social such as student's relationship to others (Björn Ahlström , 2010). At the school level, it is an indication of the school culture or climate (Björn Ahlström , 2010). One female participant who was diagnosed with major depression, believed the bullying she experienced at school (as a recent immigrant in Canada), could have affected her mental health, she said:

> In Pakistan I was doing very well in school. When I came to Canada, I didn't know what my teachers were saying to me anymore. When they were talking to me, I would try to appear confident and answer them and give the wrong answer and everybody would laugh. I was bullied a lot from grade four to grade eight because I didn't know how to communicate with anyone. Then in the 8th grade…one of my classmates he was laughing at me. I got him and I kicked him really hard and I was sent to the principal's office. They were like why did you do that and I started crying and I started explaining that he was pulling my hair and he laughed at me everyday and I just couldn't take it anymore and then they set me up with a social worker at school. (F3).

The following quote by an immigrant male youth, who had been bullied at school when he was new to Canada, illustrates the effects of bullying. His feelings are expressed as follows:

> Sometimes it can be unsettling and traumatic, and you know you can still kind of feel it for a while. You may even want to change the way you behave about things and you might not be happy or might not feel safe anymore. (FG2M2*).*

None of the youth in my study suggested having experienced severe and persistent forms of bullying or developing serious symptoms as a result of this behaviour. However, research has shown that victims of bullying can develop physical symptoms such as sleeping problems, headaches, and stomach aches and feeling of inadequacy (Fritz, 2006; Yerger & Gehret, 2011). If bullying persists over long periods, victims may develop serious mental health problems, such as depression and even suicidal thoughts (Fritz, 2006; Yerger & Gehret, 2011).

5.3.3 Macro-Level Factors

Macrosystem involves broader societal level influences, and cultural context in which the immigrant youth live. It is related to such issues as politics (for example laws, rules, policies), socioeconomic status, poverty, ethnicity, ideologies and cultural norms and values (Christensen, 2010; Neal & Neal, 2013).

5.3.3.1 Parents' Settlement Struggles and Survival Employment

> *We had come with our dreams, thinking that we are highly educated and that we will easily get employment, because of our education. My husband was an agricultural engineer, yet we started from zero. In the beginning our hearts were unhappy, we felt like running back to our country* (FG2Mo4).

The above exemplar quote shares the emotions of an educated immigrant Pakistani mother who arrived in Canada in 1998 with dreams of a bright future for her family (husband

and two children). As the realities unfolded dreams of the land of opportunities faded. Youth used words such as "*starting a new life from scratch*", "*from the very bottom*", "*from nothing*", and "*making your way up*" to describe the economic hardships their families endured, after coming to Canada. Some youth who had been born in the Middle East did not speak of financial hardships.

All youth appreciated their parents sacrifices to settle and support their family in Canada. As new immigrants their fathers had toiled and sweated for years on low wage precarious jobs. Their families had felt miserable living in small basement apartments (without sunlight), and the prevailing employment conditions. Yet, they had been hopeful that better times would prevail. In this context one female participant (F2) who had been in Canada for 2-3 years remarked:" *We had very good business back home but now we are facing this poverty, but with my Dad working in the factory. My Dad says with passage of time you know we will cope with this all."* A new immigrant father was optimistic about his family's future in Canada. He hoped his son would graduate from college with a heating and cooling HVAC certification, and together they would establish a small business.

Majority of youth appreciated and admired their parents' hardships and sacrifices in settling their families in Canada. One focus group female participant said that when her father first came to Canada, he lived in a very tiny apartment in Montreal city, which he shared with several people including an aunt and uncle. He worked very hard as a pizza deliveryman, and when he had saved enough, he sponsored his immediate family to join him in Canada. Another female participant (FG2F2) appreciated her parents sacrifices and commitments to their children's future: "*So you see all the effort and all the pain and the long hours they (parents)*

have done and when you see all of that, then you think and appreciate it and you want to be like them, you look at them as heroes and role models."

Most of the youths' parents had experienced a decline or loss of educational, professional and socioeconomic status. Almost all youth explained that despite their parents being well-educated with comparable university degrees from Pakistan, their qualifications were not recognized in Canada. Neither were their skills and work experience counted towards employment in which they had trained. Canadian immigration policies select professional and highly skilled migrants to migrate to Canada, yet in actuality on arrival in Canada, many of them are unemployed or underemployed (Lo, Li, & Yu, 2019). Systemic exclusion consequent to nonrecognition of their foreign credentials, restrictions to gainful employment consequent to regulations (such as education requirements, training, and licencing) (Bauder, 2003), delayed assessment by regulatory bodies, absence of Canadian employment experience, and gender and racial/ethnic discrimination (Creese & Wiebe, 2012; Dean & Wilson, 2009; Wilson, 2019) barred skilled and educated immigrants from many opportunities. Upskilling or pursuing additional education or training in Canada provides opportunities for better employment or higher income for immigrants in some occupations, but few immigrants have the resources to pursue higher education in their profession (Wilson, 2019). These realities are captured in one mother's quote:

> No there was no upgrading. There was always the rent to be given and the daily needs to be fulfilled. We had not brought much in savings with us. As soon as my husband found an agency that was offering him a labourer's job, he took the offer. It was a very tough job and my husband he kept going at it despite of back pain, but he had no other option. (FG2Mo4).

Many youths and many mothers said that employment agencies had channelled their fathers and husbands to low-waged, low skilled, insecure "survival employment." Even after residing for many years in Canada, immigrant parents (particularly fathers) were not able to exit from those occupations and gain meaningful employment in a profession they were trained before they migrated to Canada.

Pakistani immigrant fathers' financial responsibilities often stretched to their extended families in Pakistan. While relatives in Pakistan always expected financial support and gifts from those in Canada. Collaterally, parents felt a duty to support their extended families in Pakistan. This action helped immigrant families to maintain their dignity and preserve their reputation before their Pakistani relatives. Over the years such financial commitments had become difficult, burdensome, and emotionally draining for their parents. The youths' narrative showed that new as well as less recent immigrant families often experience hardships because of financial instability that impacts their mental health and their family's mental health. The next section discusses the impact of low income on the mental health of the participants.

5.3.3.2 Financial Difficulties and Impact on Mental Health

At various points throughout the focus group and interviews participants spoke about the financial hardships their families experienced as recent immigrants, which caused persistent tension in their families. After being in Canada for more than a decade, some families still struggled to make ends meets. Evidence shows that rates of poverty and unemployment are almost double amongst immigrants as compared to those born in Canada (Raphael, 2016). About 30% of immigrant families in Canada continue to live below the official poverty line during the first 10 years after settling in Canada (Beiser et al., 2002). Financial obstacles including underemployment, inadequate income, and access to affordable housing, can increase stress and

impact the mental health of new immigrants (Salehi, 2010). Socioeconomic resources are the strongest protective factors against stress (Denton, et al., 2004; Van de Velde, et al., 2010). A report by the Provincial Centre of Excellence Centre for Child and Youth Mental Health found that family-level poverty in children and youth was associated with mental health problems and poverty in adult life (Lipman. & Boyle, 2008).

Not having enough money to fulfill daily needs stressed immigrant families and resulted in arguments and conflicts between family members. One female youth said: "*Not being able to bear our expenses because we have no source of income, we are facing a lot of trouble, it affects us, there is tension in the family*."

All youth and parents talked about difficulties finding employment and affordable housing. One female youth described how her family had lived in an unsafe neighbourhood for many years, because they could afford to move out. She narrated:

> Yes, it was really cheap to live there but it was also a very bad neighborhood. A man who once threw his wife off the 12th floor balcony and my parents were mugged twice in the neighbourhood. We lived there because it was the only place we could afford at that time. (F4).

New immigrants often did not know where to seek for financial help. Some new immigrant families had settled in small towns where a close relative had offered them a home to stay. The youth and parents explained that there was no settlement agency in close geographical proximity to where they lived. As new immigrants in the country with no access to settlement services the family had made limited progress in learning English, and no success in securing education and employment. One girl from one of these families was able to connect to social worker and get assistance. She said:

> I was connected to a caseworker government provide me…. then I felt confidence in my self that I can bear my expenses that made me mentally stable. When I was in tension, obviously everyone in the family was in tension. (FG1F1).

Another female youth spoke how living pay cheque to pay cheque over the years had worn down their parents. The circumstances had affected her parents' health which since then had gravely declined, they were both suffering from depression. The parents' depression affected herself and her siblings. Recent immigrant parents were particularly stressed about being employed in unsafe workplaces. One mother in the focus group told how labour work was affecting her husband's health:

> My husband was engaged in it for 6 months to a year. There was a lot of heavy lifting, he developed problems in his back, but he kept at it as he had not other option. It also took him time to make contacts and networks. (FG2Mo3)

One female participant (F2) told that before her family immigrated to Canada, they owned a large business with many employees in Pakistan. In Canada, her father found employment in a factory and had to work under stressful conditions. The losses, pains and hardships that came with decline in socioeconomic status were too much for her parents to bear and have since affected the psychological health of their entire family. Her feelings are captured in her direct quotes:

> So first day when he went there …in the factory, when he came back home he literally cried very badly, because back home he was a business man he had a lot of employees, but now he had to work very hard to get minimum wage so it was very depressive for all of our family…it affects the whole family. (F2).

Socioeconomic status is associated to health, morbidity and mortality (Adler & Rehkopf, 2008). Decline in socioeconomic status is linked to increased feelings of sadness, depression and loneliness (De Maio & Kemp, 2010). A study exploring the health impacts of under/ unemployment among skilled immigrants in Mississauga, Ontario found that lack of income, loss of employment-related skills, loss of social status and family pressures affected the mental health and physical health of recent immigrants which extended to their families members (Dean & Wilson, 2009).

5.3.3.3 Discrimination: Race, Religion and Accents.

Several youths described their experiences of overt and perceived discrimination, which they believed was based on their race, gender, language, religion, and country of origin. These experiences left them shocked, shaken and uncomfortable. Youth were targeted because of how they looked (they were brown and wore a beard), dressed conservatively (wore a head covering), or spoke with an accent. Female youth were increasingly vulnerable to discrimination because of their Hijab or head covering. Two siblings (a bother and a sister) whose family had moved to Canada from the USA in the post 9/11 era, when Muslims were being discriminated, spoke about their experiences with Islamophobia that had gripped the world. The sister said:

> When people wear the hijabs and Abayas… people say they are terrorists even though they are not. People shouldn't think they are terrorists because they're wearing the hijab it's our culture, but why don't people think that way? (FGF2).

The female participants who wore a hijab (about seven in number) had experienced racial, religious and gender discrimination. Complete strangers in public places had attacked them with racist comments and hateful behaviour. For example one girls (FG2F3) recalled a frightening incident when she was on the subway: *"Somebody spat at my feet one time in the*

subway, and shouted racial slurs at me, it was terrible, and I was so scared, yet I was like whatever just brush it off." Another female participant described a very uncomfortable situation when she went swimming at a Montreal Hotel, where she was staying with her family. As she swam with her sister in a full body Muslim swimsuit, she was approached by the hotel/pool management, who told the girls to stop swimming and leave the pool area. When she asked for an explanation, she was told that the management had received complaints regarding her swimwear, so she could not swim nor use the pool area while she wore the full body suit. The girl and her sister did not challenge the hotel management and did as told. In these quotes she explains why she had walked away from the situation:

> I've been going to pools ever since I was young, obviously, I have to deal with stares. I did not want to attract attention, and when you don't know what everyone's going to do… you don't know whose side they're going to choose. They don't have to be on your side right? So, you just walk away, just take that with you, and walk away. (FG2F1).

When others in the focus group asked her why she didn't take the matter to the human rights tribunal or the media, she said: "*I felt helpless, I didn't know what to do. I did write an editorial about it, but I didn't send it for publishing to the news paper, as I was not confident to put up my story out there*." One of the youths commented that Muslim women were being increasingly discriminated for what they wore. She (FG2F3) said *"We have been marginalized in our society especially for wearing our religion on us."* Another girl expressed her concerns that the way Muslim women dressed limited them in some areas: *"We Muslims are different as we wear a hijab, our dressing is different, but it is also a barrier."* One female youth told the others in the focus group that she stopped wearing her hijab because "*I think it's better not to look like an extremist*" and that "people picked on her a lot." She also said she was not comfortable from

the stares she got from people. Some of the male youth also experienced racism and discrimination because of they wore a beard or dressed more traditionally. An 18 years old male youth described an unpleasant incident he experienced as a newcomer in Canada. An older Caucasian male suddenly approached him in the mall and blatantly disapproved and criticized the youths' beard. As a teenager new to Canada, the situation left the youth badly shaken and wanting to not stay in Canada.

Some youth said their peers ridiculed them for their South Asian English accent. Youth had observed that such people only made fun of accents of people from specific racial background. One girl said: "*If you are Brown or Black and have an accent people will make fun of you*." Other youth felt that this behaviour was a subtle form of racism. According to some participating youth, immigrants from Poland and Spanish speaking immigrants had bad accent but because they were "White", people didn't make fun of their accents but rather called them cute. They also felt that their peers made fun of the accents of actual Brown people from Pakistan, India or Bangladesh and black people with Jamaican accents. Many recent immigrant parents who participated in the study did not think that there was overt discrimination in Canada.

5.3.3.4 Stigma or Ignorance?

The youth held different opinions about how mental health was conceptualized in the Pakistani community. Several youths believed that immigrant Pakistani people were not giving mental health the attention it needed nor were they addressing mental health problems. The youth in the focus group discussed that many older Pakistani people did not know that mental illness was like any other chronic illness. Due to their ignorance, they equated mental illness equal to madness. One youth came to the defense of the parents, saying that it was not fair to blame the older generation for not knowing about mental health, she said:

> But it's not that our parents were taught mental health, it wasn't a topic that was discussed at all, and they didn’t teach that in class. They haven't been exposed to that knowledge maybe there wasn't enough science or research at that time. (FG2F3).

Some youth felt that parents were already burdened with too many worries and responsibilities of their own and therefore were not able to comprehend the scale of the impact mental health had on youth. These same feelings were conveyed by youth in the open-ended survey questions where some youth felt their parents were already in a perpetual cycle of stress, depression and fraught with responsibilities, and they didn’t want to add to their problems. Regarding this discussion a female participant (FG3F3) commented, “*I guess a lot of times parents don't see your problems as a big problem and therefore they really don't try to solve it, I guess. They don't understand a lot of that stuff.*”

Many youths expressed their disappointment at the high level of stigma towards mental health in the Pakistani community. Stigma as a theme echoes to the themes on the open-ended health questionnaire, several survey respondents reported about shame and mental health stigma. One female (FG2F2) said: *“Unfortunately there is a lot of stigma in our Pakistani culture. The older generations aren't educated enough about what mental health is.”* One male youth added to this discussion. He said:

> I think people who are educated and have been exposed to mental health would not be like that. But then people who are brought up, and their education is from Pakistan where there is a ridiculous amount of stigma, I think they will have a lot of judgement. (FG2M2).

Relative to the youths’ beliefs about their parents, at least half of mothers interviewed appeared to be knowledgeable about mental health. They appeared to understand that mental

health was a chronic illness needing treatment, but also expressed their concerns regarding stigma surrounding mental health. Stigma can make it harder for people to seek and respond to mental healthcare. One mother (FG2Mo1) whose daughter had bipolar disorder diagnosis said, "*if I tell people about her problem, they will say she is mad or crazy. She will get a label, so that's why we do not discuss in front of others."* Another mother said (FG2Mo3) said, "*we hide from each other, people tell me 'no, no, do not talk openly about such things.' I say let people say what they want to say. I have to look after my child and raise them to be strong.*" One mother (FG2 Mo6) said the problem is that if people get to know my daughter has a mental illness, she will not get married. Another mother said *"all the problems start from home. People think the mother didn't raise the child well. All the blame is put on the mother, even the child's father blames the mother*." Other mothers thought that hiding about mental health was necessary to avoid people shaming the affected child and their family, which was not good for their mental health.

5.3.3.5 Social Exclusion

It has also been observed that students tend to associate with person of a higher ranking in the social hierarchy, such as a popular kid at school, and distance themselves from others seen to belong to a lower status group, such as an immigrant or racialized person (Bellmore, Nishina, You, & Ma, 2012). Many youths mentioned about not being able to "fit in" and "being left out" of activities and social gatherings with their Canadian peers. One male youth (M1) felt excluded from his peers because of his religion and ethnicity. He said: "*There will be certain things I won't be able to do. You won't feel fully involved in it, you will be missing out on all the stuff that your teammates are doing…. involving food and social relations."* Similar sentiments were shared by

survey taking youth, on the health questionnaire. They expressed feeling isolated, and excluded by their peers because of cultural differences, language proficiency and racial discrimination.

The literature reports that newcomer youth often experience social exclusion (Oxman-Martinez, et al., 2012). Ethnic minority youth are more likely than Caucasian youth to experience exclusion among peers (Plenty & Jonsson , 2017). Some recently immigrated youth felt that those who had been born in Canada or lived in Canada for longer periods did not face the same social challenges as they did. They also felt that Canadian-born Pakistani youth had an advantage over them as they were able to participate more fully in the Canadian society. A newcomer youth FGF1 said*: I think because people who are born here, their dressing or dress code is totally different. We are totally different, so I think this makes us separate from them."* For recent immigrant Pakistani born youth, the biggest challenge was trying to "*fit in."* Lack of proficiency in English made it difficult for them to make friends and participate in social activities like everyone else. As newcomers some youth felt hurt because their Pakistani-Canadian extended families and relatives (who were more Canadian) knowingly excluded them from conversations and discussions because they couldn't speak English fluently. One female youth said:

> When I came here, a lot of my relatives were like Canadians. They also knew my language. But they used to speak in English in front of me to embarrass me. When people make you suffer in front of the other people, it makes you feel depressed. (F2).

Lack of family networks (including extended family) and friends made youth feel lonely and they longed to make friends and engage in social activities. Youth also mentioned that as recent immigrants their parents did not have a social circle or friends, they felt lonely and depressed. Parents also voiced they lacked social contacts and networks. In this context a female youth commented:

> When we came here my mom used to cry a lot, because if we were in Pakistan, she would be able to go to next door, and strike up a conversation with a neighbor. Now she is stuck here and no one speaks her language, no one understands the way she dresses, the way she speaks, the way she cooks. She really missed that… it took a few years for her to find a nice group of Pakistani people to make friends with. (FG2F2).

5.4 Experiences with Mental Illness, Healthcare and Help Seeking

Participating youth and parents were asked if any family member(s) had a mental health problem at present or had experienced it in the past. They were also asked where they received treatment/help and if they experienced difficulties in seeking treatment. The response to this question emerged as theme 13. Three participating youth told that they had been diagnosed with a mental illness and had received/were receiving treatment. Other youth made vague references to mental health problems using phrases such as: going through a difficult and stressful circumstances, feeling very depressed, or feeling anxiety. Three youth had seen someone close or in their family struggle with mental illness. Three recently immigrated parents felt that their mental health had improved since they came to Canada. One mother (Mo2) had observed that many people in Canada had anxiety and worries, but their worries were different from those Pakistani immigrants' families faced. A male youth explained that initially his family was unaware of his sister's psychosis, and thought her behaviour was disobedience. He said:

> My 17 years old sister is diagnosed with psychosis. I had to look after her and help her out at CAMH. My parents didn't know about psychosis, so they were like 'she's just being disobedient' that's what we thought at first. Then we found out that this might be a mental health issue, so we went to the doctor to talk to them and they started medication. (FG2M3).

Participating youth were asked where they would go to seek help, if they were feeling stressed or depressed. Majority said, they would feel uncomfortable talking about their mental health problems with others, particularly about depression or anxiety. A female youth (FG2F3) felt she wasn't ready to talk about mental health issues: *"I am still at that stage where I still can't talk about my feelings, it is like a really deep thing. I can't talk to anyone."* Another participant (M1) had a different perspective*: "I would say, it's also an ego thing for some people who can't express it. It's their ego that is stopping them."* A male youth (FG2M2) explained: "*I feel like when people know weak points about other people, they can take advantage of it. When people know what your issues are, they kind of use it against you*." Another youth said did not hide his mental health issues anymore. He (FG2M2) said:*"I was a little insecure, I was not that open, I did not express it to anybody but now I have opened up, and I never have problems discussing things with people.* Some youth believed that sharing and listening helped build trust and develop sense of responsibility. In this context a youth said:

> Once you reveal something about yourself to somebody, the other person gets closer to you. Since this guy expressed something so deeply about himself, then I think maybe I need to help him out. That kind thing makes me feel responsible. (FG2M3).

Some youth said that if they faced any difficulties in life they would first speak to their mother. Others suggested they would share their problems with a close friend, a sibling or a cousin. Many said that they would devote more time reading the Quran and saying prayers in the mosque or home.

The youth agreed that communication was key to treating mental health problems and preventing mental illnesses such as anxiety or depression. Participants suggested talking with friends was helpful, asking them to listen to your problem and helping to look for solutions.

Youth mentioned they had approached their teachers to ask their help on academic issues and guidance on navigating the educational system. Some suggested that speaking with parents, being transparent, telling them the truth also helped. Youth also felt it was easier to speak to a sibling than parents, particularly in stressful and emotional situations. One youth felt that talking to friends about his struggles with mental health problem didn't help much. FG2M2 said:

> I tried a couple of times to talk to a few people in the early stages of my depression. I never felt like, I needed to ask them for help…. for something so personal. I didn't feel better at the end of it, I just felt like this was a long road ahead, and this was not helping much. (FG2M2).

Youth realized the importance of getting a correct diagnosis and then taking the appropriate treatment. Youth appeared dissatisfied with mental healthcare services. For example, one youth was struggling with a stressful situation and his family doctor told him, that the symptoms he was describing were all in his imagination. Another youth, who had been taking medication for sleep problems felt she had some underlying medical condition, but the doctors were not able to diagnose it. Two youth who were consulting with their psychiatrists for mental health problems, felt their doctors forced their opinion on them, and their psychological problems not heard well enough. Youth said that they would consult a psychiatrist who was from their own culture who would be able to understand their problems better. Youth also noted that the attitude and behaviour of people towards those experiencing mental illness can change the course the illness. They further suggested that understanding the context of the illness and providing the support needed can make those with mental illness better but being dismissive and unsupportive can worsen the illness and sometimes lead to serious consequences.

Mothers generally thought that mental health services in Canada were accessible. However, some mothers did not agree. One mother was extremely dissatisfied at the mental healthcare system she couldn't access for her two adult daughters diagnosed with bipolar disorder. She came to know about her daughter's mental illness through her school when her daughter had tried to harm herself by cutting her wrists more than two dozen times. The mother was frustrated at the long delays in getting a psychiatric appointment for her daughter. Another mother was concerned about her adolescent son who was exhibiting unstable emotions but was reluctant about seeking help from a therapist. Mothers in the focus group discussion showed concern about the disinformation their children were absorbing through the web and from the outside world. These were causing personal and family problems. They felt they needed to stay in constant and close communication with their children so they could timely address their social, emotional or health issues as they arose.

The service provider two explained that some newcomer youth were accompanied with their family and some were not. One said: "newcomer youth who come to our settlement agency are stressed and anxious about getting settled." The service providers identified the primary stressors which affected the mental health of immigrant youth and their families: 1) completing educational assessments and taking additional course to graduate (this applied to youth who recently completed high school from Pakistan); 2) gaining financial stability- although accompanied with sufficient funds at the time of arrival, the wealth of immigrant families was quickly depleted due to rupees to dollar conversion difference, high living cost in Canada, and unemployment; and 3) overcoming cultural disorientation and language barriers.

5.6 Chapter Summary

Chapter five presented findings from the individual interviews and focus groups. Mental health was described as a holistic spiritual concept in which an individual learned to balance their strengths and weaknesses - the ability to cope. The 11 themes relating to the factors shaping youths' mental health were organized by Systems Perspective into micro-level, meso-level and macro-level factors. These themes addressed important aspects of immigrant Pakistani youths' mental health issues. For example, the micro-level themes *Resilience* was strength-based concept exhibited personal coping skills and was established through family and community supports. The other important emergent theme at the micro-level was *Identity and Acculturation Stress*. This theme highlighted immigrant Pakistani youths' challenges situating themselves as either Pakistani or Canadian or both. The acculturative stress, cultural gap, and cultural identity confusion resulted in parent-child relationship tensions (a dominant meso-level theme).

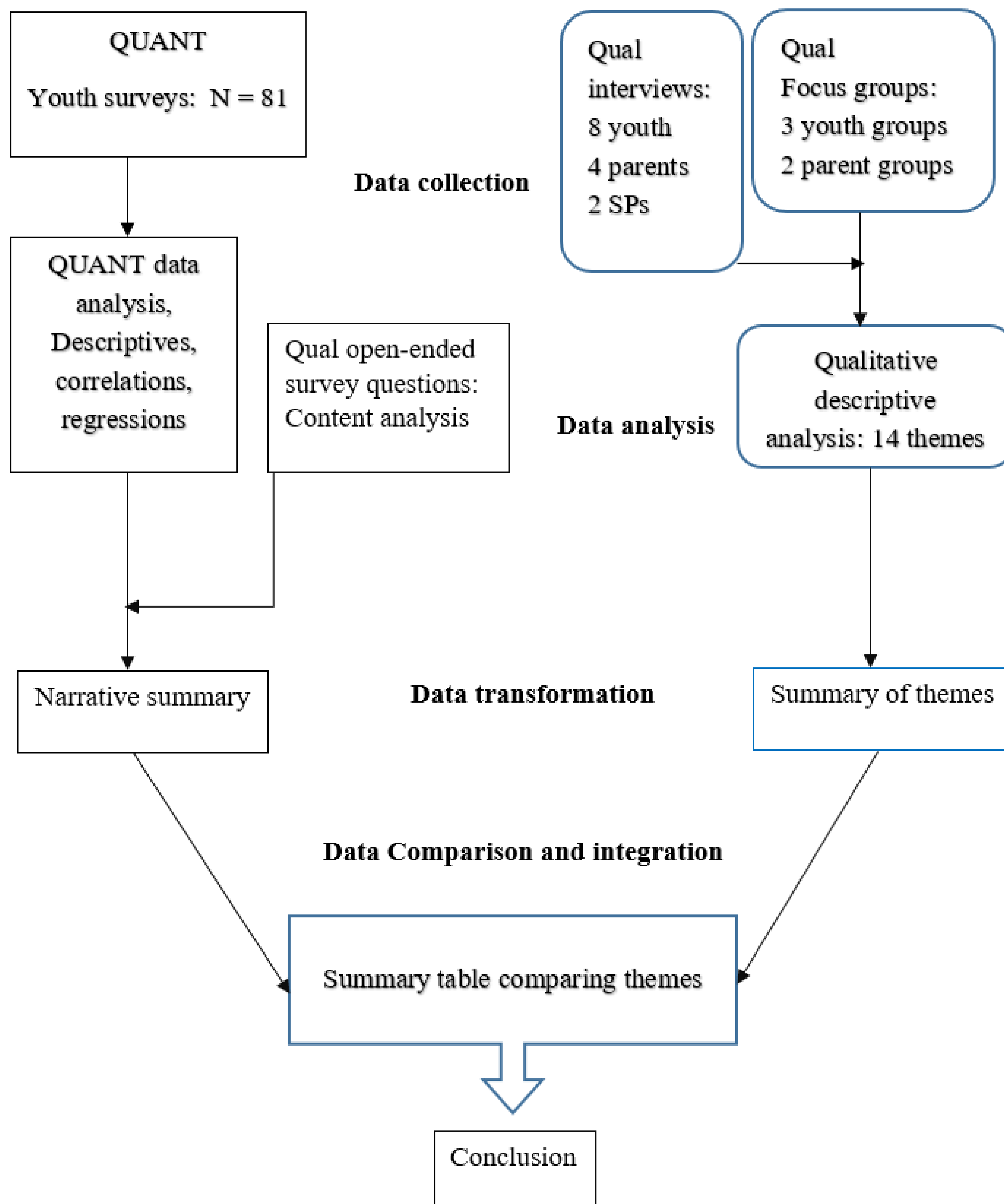
The theme *Parents and Intergenerational Conflict* exposed youth rebelled in silence to their parents' efforts to preserve their heritage culture, religious modesty, and their family unit. However, the two themes *Parents' Settlement Struggles and Survival Employment* and *Financial Difficulties and Impact on Mental Health* illustrate a different aspect of youths' attitude towards their parents. The youth were grateful and appreciated their parents' struggles. Parents were watchful of mental health problems in their adult children. The themes *Peer-Victimization and Bullying: Terrorist or Muslim*? *and Discrimination: Race, religion and Accents*, *Stigma or Ignorance*, and *Social Exclusion* address macro-level mental health concerns. Theme 13 discussed the youths' and their parents' experiences of youth mental illness, mental healthcare and help seeking. In the following Chapter six, I describe the integration and interpretation of the mixed methods and also address the mixed methods research questions.

Chapter 6: Mixed Methods: Integration of QUAN and Qual Results

This chapter presents the mixed methods findings as described and proposed by Creswell and Plano Clark (2011; 2017). Mixed methods integration requires the QUAN data and qual data are reliable (I showed the data were reliable in Sections 3.4.1.4 and 3.5.5) and exist in forms that allow for their combined analysis (Creswell, 2014). The mixed methods process involves the merging (integration) and interpretation of the two data sets. Integration and interpretation assisted to answer the mixed methods research questions: 1) In what ways do Pakistani youths' identities including gender, race, migrant status, socioeconomic status, and religion shape their mental health?; and 2) What are the specific mental health needs of immigrant Pakistani youth by gender and generation status?

Creswell (2014) suggests that there are several ways to merge the two datasets during the data analysis stage, these include: side-by-side comparison, data transformation, or joint display of data (data merged into a single visual). In Creswell (2014) some examples of mixed methods procedures researchers have used to analyze QUAN and qual data within a mixed methods framework are provided, these include: 1) Onwuegbuzie and Teddlie (2003) seven stage model which consist of: i) data reduction, ii) data display, iii) data transformation, iv) data correlation, v) data consolidation, vi) data comparison, and v) data integration; 2) Jang et al.'s (Jang, McDougall, Pollon, Herbert, & Russell, 2008) four step approach to integrating mixed methods data, which include: i) parallel integration (for member checking), ii) data transformation (for comparison), iii) data consolidation (for emergent themes), and iv) case analysis (for fine-grained descriptions); and 3) Li and colleagues (Li, Marquart, & Zercher, 2000) four steps to complete mixed methods analysis, these consist of: i) data reduction, ii) data transformation, iii) data comparison, and iv) data interpretation.

Figure 7: Embedded Concurrent Mixed Methods: Data Analytic Process



I adapted the mixed methods integrative data analytic strategies described by Li et al. (Li, et al., 2000) as mentioned in Creswell (2014). Figure 7 shows the data analytic process for the concurrent embedded mixed methods design in my study. The steps taken to complete mixed methods analysis in my study consisted of: 1) data collection, 2) data analysis, 3) data transformation, 4) data comparison and integration, and 5) arriving at a conclusion. Data reduction was embedded in the data transformation and data comparison step.

Table 23: Summary of Triangulated Themes Across Interviews and Focus Groups

Theme	Description
1. Mental health	This is defined as a holistic concept encompassing physical and emotional health and spiritual wellbeing. It represents a stress-free state, and equilibrium between strengths and weaknesses. It represents positive thinking, contentment, coping, self-control of negative emotions like anger, jealousy and hatred. It is dependent on complex human relationships.
2. Resilience	This suggested youth coped with academic stress and their day to day stress by setting goals, being mindful, and saying their prayers. They looked for support from friends, siblings, family, relatives and health professionals. Resilience was established through personal strength, positive parent-child relationship and social and community supports.
3. Identity and acculturation stress	This refers to youths' challenges navigating between the heritage Eastern Muslim culture and the host Western culture. Challenges include acculturative stress, psychological stress, cultural identity confusion, and parent-child tensions. - Mothers understood their youths' cultural confusion. They wanted to preserve their heritage culture, religious values, family structure, while protecting their children from social ills.
4. Academic expectations and stress	This suggests that parents fostered high academic expectations for their children. Youth were motivated to perform well, of their own initiative, and felt obliged to their parents for their sacrifices and wanted to please them. Yet youth were uncertain about their future in Canada, and tired of parents' constant comparison to successes by other youth.
5. Role of religion in coping with stress	This suggests religion was important to Pakistani youths' identity. It protected youth from mental health problems and a variety of stress (related to education, acculturation, relationship), contrary to literature it did not protect against discrimination. -Parents found mental health support for themselves and their children through "salah" (prayers) and reciting the Quran.
6. Parents, and intergenerational conflict	This refers to the stress youth experienced as a result of the parent-child acculturation gap. Increased differences in the pace of acculturation increased intergenerational conflict. Youth had difficulty sharing their personal problems with parents (particularly fathers) because of parents' inability to understand, or tackle their issues related to friends and school. Despite reservations parents allowed children to participate in specific activities. Youth preferred to confide in siblings over parents.
7. Peer-victimization and bullying: terrorist or Muslim?	This refers to youths' experiences at school as recent immigrants or when younger. This reflects on the behaviour of peers towards others who look or behave differently. Youth were bullied because they looked Muslim and Islamophobia was prevalent at that time.
8. Parents' settlement struggles	This suggests well-educated parents' qualifications and training, and work experience were not recognized in Canada and did not benefit them towards employment. Youth appreciated parents sacrifices.

and survival employment	-Parents lacked resources to pursue equalizing education or upgrading. Fathers were funnelled to low-skilled, low-wage "survival employment."
9. Financial difficulties and impact on mental health	This suggests that losses (loss of employment, social status and family support/networks) and low income affected the health and mental health of youth and their families.
10. Discrimination: race, religion and accents	This suggests that youth faced real and perceived discrimination because of religion, language, gender and race.
11. Stigma or ignorance?	This suggests stigma and ignorance were a key barrier towards help seeking for mental healthcare. -Both youth and parents would not expose mental health problems because of stigma in the Pakistani community Youth feared being shamed for their mental health problem.
12. Social exclusion	This suggested that recently immigrated youth felt left out by Canadian youth, and their Pakistani peers in Canada and previously settled relatives in Canada because of lack of language proficiency and not fitting in the host society. -Mothers felt socially excluded because of language barriers and lack of social networks in Canada.
13.Experiences with mental illness, healthcare and help seeking	This theme suggested that feelings of loss, helplessness, sadness, and sleeplessness due to personal circumstances, family problems, parental discord, and environmental factors could lead to development of mental illness (such as depression and bipolar disorder). Youth found mental health support through communication and from siblings, friends, parents, family doctor, and praying, and exercise. - Several youth believed that mental health support from parents was absent or inadequate, and from doctors lacked cultural and problem sensitivity. -From mothers' perspective, their son/daughter's mental health struggles were a serious concern. So were the systemic barriers to mental healthcare.

6.1: Data Reduction and Transformation

Table 23 presents a summary of the qual themes (data reduction). Table 24 illustrates the QUAN data narrative summary, which is the transformed and summarized presentation of the most salient information from the survey responses, text, tables, figures, and open-ended questions. Some of the frequency responses on the raw items on the Multigroup Ethnic Identity Measure (MEIM) items, and the Child and Youth Resilience Measure (CYRM-12) have been utilized to supplement the findings from the closed-ended and open-ended survey responses. The raw scores are summarized in Appendix I and Appendix J. Collectively these contributed to the quantitative descriptive/narrative summary to provide comparable QUAN data for integration with the qual data to compile the mixed methods results.

Table 24: Narrative Summary: Quantitative Survey Responses

	Statistical Analysis: Themes	**Description**
1	Income	Findings suggest that youth born in Pakistan and the Middle East were more likely to be living in low income households. Youth born in Canada or a Western country were more likely to belong to middle to high income households.
2	Self-identified mental health	Findings suggest that less than one-half (44 %) of sampled youth felt their mental health was very good or excellent. One-fourth youth (24.4 %) youth felt their emotional health affected their social activities severely to very severely, while nearly one-third (29.6 %) youth felt that most days were very stressful. There was no difference between male and female youths' mental health (*Health Composite score*). There was no difference in mental health between Pakistani youth born in Canada and those who immigrated to Canada from Pakistan.
3	Variations in *Health Composite*	Findings suggest that *Health Composite* did not differ by gender, region of birth, and generation status in the sampled youth.
4	Resilience	The findings suggested that nearly all youth agreed that getting an education was important. Most youth (4/5) felt confident that they were able to solve their problems without harming themselves or others, but only 2/3 knew where to get help. Resilience did not vary by gender, income or between Canadian-born Pakistanis or immigrant Pakistanis.
5	Ethnic identity and belonging to ethnic group	This suggested one-half youth identified themselves as South Asian (50%) and one-fourth as Pakistani (25%). Nearly every youth felt good about their Pakistani culture and background. About one-half felt a strong attachment to their group (Pakistanis). The majority (4/5) practiced their culture, took pride in being Pakistani and told others about their culture and felt a strong sense of belonging to their culture. The majority (88%) felt happy to be Pakistani, but one-third actively socialized with other Pakistanis. Ethnic identity did not vary by gender, income or between Canadian-born Pakistanis or immigrant Pakistanis.
6	Self-esteem	Findings suggested that self-esteem differed between Canadian-born Pakistanis or immigrant Pakistanis youth. Youth felt good about their academic achievements, spending time with family and friends, exercise, spiritual connectedness, Islamic learning & praying, music and food. Lack of motivation, and discipline, and increased stress, feeling depressed, shyness, rejection (for job and university/ program of study) made them feel bad.
7	Role and support of parent, teachers, and friends	Youth found friends, family and teachers were supportive. Nearly three-fourth youth suggested they did not hide from their parents. Findings (from CYRM scale) suggest that 70% youth felt they belonged to their school, while nearly 80% youth felt their family and friends supported them in difficult times.
8	Fairness and opportunities	This suggested that majority of youth felt that they were treated fairly in the community and had equal opportunities to develop and flourish.
9	Personal experiences and mental health treatment	Findings suggested that two-fifth youth experienced some mental health issues in their life (such as feeling stressed, very anxious, or depressed) or seeking help for it. Youth were not satisfied with the mental healthcare received. Healthcare providers were not responsive to their problem, did not pay attention. Youth did not benefit from them.
10	Stigma and shame	Findings suggested stigma was prevalent in the Pakistani community and influenced how youth and families sought mental healthcare.
11	Social exclusion	Findings suggested youth felt excluded because of language, and cultural barriers.

6.2: Data Comparison and Integration

Table 25 illustrates a comparative summary of qual data and QUAN descriptive data. The themes and descriptions from the individual interviews and focus group were compared and contrasted with the themes and descriptions from the surveys. The information from the QUAN data overlapped with the information from the qual data but some aspects differed. Integration of the QUAN and qual information identified nine common themes which included: *mental health cases, mental health supports, dissatisfaction with treatment and supports, stigma, financial difficulties and impact on mental health, resilience, identity and acculturation issues, discrimination, justice and fairness, and social exclusion.*

Table 25: Comparison of Qual Interview Data and QUAN Survey Data

No.	Themes	Individual interviews and focus groups (qual)	Paper-based and web-based surveys (QUAN)
	Sample characteristics	- *Youth*: female (14), male (12) average age 21.6 yrs. - *Birthplace:* Pakistani (24), Saudi Arabia (2). - *Education*: high school (5), college/university (18), and finished highs school/university/working (3). - *Parents:* female (15), male (1), average age 46 yrs. *Birthplace:* Pakistani (15), India (1) - *Service providers:*(2 males) average age 41 yrs. *Birthplace:* Pakistani (1), India (1).	- *Youth* (81) female (51), male (30) average age 20.5 yrs. - *Birthplace:* Pakistan (51), Canada (18), Middle East (6), USA (4), Australia (2). - *Education*: High school (14), college/university (67).
Mixed methods research question 1: How does gender, race, migrant status, class, socioeconomic status, and religion shape youths' mental health?			
		Qual	**QUAN**
1	Mental health cases	- Four youth had depression and bipolar disorder. - No difference between male and female youth. - Canadian-born Pakistani youth did not participate.	- Less than half felt mental health was very good or excellent. - One third felt that most days were very stressful. - Two-fifth youth experienced some mental health issues. - No difference between male and female youth. - No difference between immigrant. Pakistani youth and Canadian-born Pakistani youth

2	Mental health supports	-Communication (with siblings, friends, parents, cousins and family doctor). - Praying and exercise.	- Youth found friends, family and teachers supportive. - Prayer and exercise. - One-third did not know where to get help.
3	Dissatisfaction with treatment and supports	- Doctors lacked cultural and problem sensitivity.	- Healthcare providers did not pay attention to their problem.
4	Stigma	- Stigma and ignorance were a key barrier towards help seeking for mental healthcare. -Fear of shame by others.	- Stigma was key barrier towards seeking mental healthcare. - Fear of shame by Pakistani community.
5	Financial Difficulties and Impact on Mental Health	-Parental loss of employment, social status and family support/networks affected mental health (both parents and youth). - Canadian-born Pakistani youth did not participate.	- Youth born in Pakistan and Middle East were more likely to live in low-income households. - Youth born in Canada or a Western country were more likely to live in middle- and high-income households.
6	Resilience	- Coped with academic stress and other stressors by setting goals, being mindful, saying their prayers (personal strength), having positive relationships with parents and availability of social and community supports.	- Education was important. - Youth were able to solve their problems. - Resilience did not vary by gender, income or between Canadian-born Pakistanis or immigrant Pakistanis
7*	Identity and acculturation issues	- Youth were challenged navigating between heritage Eastern Muslim culture and the host Western culture. - Youth felt acculturative stress, cultural identity confusion and parent-child tensions.	- Half identified as South Asian and quarter as Pakistani. - Most youth felt good about their culture and background but some did not feel a strong attachment with their ethnic group. - Ethnic identity did not vary by gender, income or generation status.
8	Social exclusion	- Youth felt excluded because of language and not fitting in the Canadian society. -Mothers felt excluded because of language and lack of social networks.	- Youth felt excluded because of language and cultural differences.
9*	Discrimination, justice, fairness	- Youth faced real discrimination because of religion, language, gender and race.	- Youth felt they were treated fairly and had equal opportunities to develop and flourish.
Mixed methods research question 2: What are the specific mental health needs of youth by gender and generation status?		**Qual**	**QUAN**
		- These represent the needs of first and 1.5 generation immigrant Pakistani youth. Canadian-born Pakistani youth did not participate. - Support for prevention of mental health problems. - Accessible (including geographically accessible) newcomer services. - Comprehensive settlement services for new immigrants. - More education, information and support for mental healthcare.	- The needs did not differ by gender and generation status/region of birth. - Training University counselors to be more responsive to students' needs. - Reduce wait times for therapy and counselling. - Access to psychologist. - Some male youth used self-help rather than tell anyone. - Educating Pakistani community on mental health to eliminate stigma.

* *Indicates QUAN and qual findings were different*

6.3: Summary of Mixed Methods Findings

The mixed methods analysis allowed for a comprehensive and meaningful interpretation of the data. The qualitive data supplemented the QUAN data, thereby addressing the mixed methods research questions 1 and 2. The results relating to the mixed methods question 1 "**How does gender, race, migrant status, class, socioeconomic status, and religion shape immigrant Pakistani youths' mental health**?" showed that there was no difference between male and female youths' mental health. Race emerged as a key determinant of mental health. It influenced youths' mental health either positively (QUAN data) or negatively (qual interviews). The qual data showed that several immigrant Pakistani youth had experienced overt discrimination, due to race, migrant status, class, socioeconomic status and religion which affected their mental health. The opposite was found in the quantitative findings, where the majority of youth (both immigrant and Canadian-born Pakistani youth) reported being treated fairly and having equal opportunities to progress at school and in life. The qualitative interviews also revealed that all the participating immigrant Pakistani youth experienced stress, confusion and cultural conflict because of the differences in their heritage cultures practiced at home and the Western culture their Canadians peers were part of. They had desired to be accepted as "Canadians." The QUAN data showed that although the majority of immigrant and Canadian-born Pakistani youth felt pride in their culture and ethnic background, but less than half (46%) felt a strong attachment with their group. The difference in some aspects of the QUAN and qual findings may be due to the method used to gather data. For example, the QUAN question may have elicited an objective perspective on discrimination in Canada while the qualitative questions gathered a more subjective perspective on discrimination.

The findings pertaining to the mixed methods research question 2 "**What are the specific mental health needs of youth by gender and generation status**?" show that the specific mental health needs of immigrant and Canadian-born Pakistani youth include prevention of mental health problems through education and information on mental healthcare (counselling and psychiatric care) and access to comprehensive settlement services (to address education, employment, housing needs) for new and recent immigrants. In the next chapter the mixed methods findings are further discussed in relation to the extant literature.

Chapter 7: Discussion and Conclusion

This chapter begins with a summary of the study, and then discusses the key findings in relation to the published literature on the topic. Due considerations are given to unknown and unexpected findings revealed in my study. I also bring to attention if the findings endorse what is previously known. Next, I interpret the study findings in light of the two theoretical frameworks (Systems Perspectives and the SDOH) introduced in Chapter one. Next, I outline the strengths of my study its contribution to new knowledge. I also delineate the study's limitations. I discuss the implications of my study in informing future research and programs and policies on immigrant youth mental health and immigrant settlement. Finally, recommendations for improving the mental health of immigrant minority youth are presented.

7.1: Summary of the Study

The overall purpose of my study was to explore of immigrant and Canadian-born Pakistani youth's mental health. I examined three aspects of mental health: self-esteem, resilience and ethnic identity. The study had three objectives: 1) to understand perspectives and experiences of participating youth regarding their mental health; 2) to understand parents' perspectives regarding the youths' mental health; and 3) to examine the factors that influence the mental health, self-esteem, resilience and ethnic identity of immigrant and Canadian-born Pakistani youth. Given the complex nature of studying mental health in community-based samples, using one single research method to gather information may have been insufficient in arriving at a comprehensive understanding of the phenomenon. Therefore, a concurrent embedded mixed methods design as described by Creswell and Plano Clark (Creswell, 2014; Creswell & Plano Clark, 2017) was utilized to examine the mental health of the youth in the context of migration, gender and income. Data was gathered using both quantitative and

qualitative methods to establish methodological triangulation (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2003). This provides greater validity and a more complete analysis of the data (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2003). The QUAN arm of the study collected survey data on health and psychological attributes including, self-esteem, resilience, and ethnic identity. The following psychrometric scales were used: CSE, MEIM, and CYRM. The qual arm collected information from youth, parents, and service providers through in-depth interviews and focus groups. The interviews included questions on mental health in the context of the migration, family, school, and community. The mixed methods findings, after qual and QUAN data were integration, are discussed in detail in the following section.

7.2: Discussion of Findings

Understanding the mental health of immigrant youth and how youth think about mental health, is important, as one in three youth in Canada belongs to an immigrant family (Statistics Canada, 2016). Earlier researchers argued for a broader examination of migration as a social determinant of health (Castañeda et al., 2015). Five years later, Raphael and colleagues included immigration status as the 17th SDOH (Raphael et al., 2020).

Youth in my study were for the most part familiar with the term “mental health” and ascribed a positive connotation to the term, such as a “holistic concept,” “being resilient”, “having a control of negative emotions” (such as anger, jealousy and being anxious), and the “ability to cope in adverse situations” (including migration related stressors, academic stress and family discord). Other studies have found that immigrant youth belonging to other ethnic groups in Canada have different understanding of mental health. For example a qualitative study on adolescent Syrian refugees in Ontario, Canada found the youth to be either unfamiliar or to have limited engagement with the term mental health (Filler, 2018). African-Canadian youth in

Toronto described mental health as having the ability to tackle life's challenges, to cope effectively without compromising one's functioning, and to be able to achieve life's goals and plans (Olawo, 2018). In another study, Asian Canadian described mental illness as lack of purpose in life, feeling lonely and insecure, low self-esteem and a lack of assurance in a new environment for immigrants (Li & Browne, 2000).

A study reported that South Asian immigrants 18 years and older living in Ontario, Canada had more diagnoses of anxiety disorder in comparison to other ethnic groups (Durbin, Moineddin, Lin, Steele, & Glazier, 2015). About one-third youth in my study reported living with significant stress, but majority reported having good mental health. Some youth mentioned that they had experienced mental health issues in the past or were currently living with depression or bipolar disorder. Gender differences (further discussed in Section 7.2.1) in depression, particularly during adolescent stage have been observed with females consistently reporting higher levels of depression in comparison to males (Denton, et al., 2004; Salk, Hyde, & Abramson, 2017). These differences persist throughout adulthood. Gender differences in self-reported mental health were not found in my study. Neither was there a difference in the mental health of Canadian-born Pakistani youth (Anglo-Western born) or immigrant Pakistani-born youth (Eastern-born).

Durbin and colleagues (Durbin et al., 2015) report that recent immigrants compared to longer term resident immigrants or native-born Canadians were less likely to use primary health care, psychiatric care, and hospital care for mental health issues. Tiwari and Wang (2008) examined mental health service use among ethnic groups (Caucasian, Chinese, South Asian and South East Asian populations) in Canada, and found South Asians compared to Caucasians were less likely to use mental health services. Some youth in my study showed lack of trust in the

healthcare system. They expressed dissatisfaction with the professional mental health services (such as therapists, psychologists and psychiatrists), mentioning that healthcare professionals did not recognize their mental health problem (two youth suggested this), were not helpful, did not pay attention to their problems and did not understand their culture-specific mental health needs. Youth also mentioned that they felt insecure about sharing this kind of information with others. These findings were supported in the literature on college students help seeking for mental health and barriers to care (Eisenberg, Downs, Golberstein, & Zivin, 2009). The researchers found that students with high personal stigma were less likely to seek help (e.g., medication, therapy, nonclinical support or professional mental health services). Lower rates of mental health service and help-seeking for mental health problems has been reported among adolescents and young adults as compared to older adults (Bruffaerts, et al., 2011; Czyz, Horwitz, Eisenberg, Kramer, & King, 2013; Downs & Eisenberg, 2012; Hom, Stanley, & Joiner Jr, 2015). The reasons that young people did not seek help was that they felt self-reliant (they could manage their problems on their own and did not need mental health care), believed that treatment may not be helpful or effective (Bruffaerts, et al., 2011; Czyz et al., 2013) or their problems would improve on their own (Downs & Eisenberg, 2012). Hom et al., (2015) also found that college students had fear of hospitalization or mistrust of mental healthcare providers.

Most youth in my study wanted help from a healthcare professional who belonged to a similar culture as their own. Research shows that Asian students are less likely to use mental health services resources that are not congruent to their cultural values, and seek culturally competent healthcare providers (Ruzek, Nguyen, & Herzog, 2011; Srivastava & Srivastava, 2019). Previous studies have shown that immigrants in Canada were more likely to become disengaged with mental health service use (Durbin et al., 2015) because of culturally-insensitive

Western mental health services (Klimidis, McKenzie, Lewis , & Minas, 2000) and dismissive attitudes of physicians and psychiatrist (Whitley, Kirmayer, & Groleau, 2006). The literature also cites that there is incongruence of Western therapeutic approaches with Islamic belief and teachings, which can further reduce the effectiveness of counselling to Muslim patients (Qasim & Hynie, 2019).

The barriers to mental healthcare identified in my study are in line with prior research as reported in a review by Dunley and Papdopoulos (2019). Hom and colleagues (2015) identified four potential barriers to help seeking for mental health in students which included institutional barriers, insurance barriers, sociocultural barriers, and psychological barriers. A qualitative study from Mississauga, Ontario, Canada found immigrants experienced economic, geographic and socio-cultural barriers in access to care (Asanin & Wilson, 2008). Participants in my study used a variety of strategies to maintain their mental health including praying, exercising, and socializing. They also mentioned that they received mental health support from parents, siblings, friends, and their family doctor. Individuals with a supportive network of family and friends, compared to less socially integrated people, have better health and recover better from health problems (Hefner & Eisenberg, 2009).

The theme *identity and acculturative stress* highlights the challenges of integration and adaptation to host culture and its impact on mental health of youth. Findings from my study indicated that the youth desired to fit in to the mainstream culture but at the same time did not want to abandon aspects of their heritage culture. The level of acculturative stress largely depends on the difference between the immigrants' heritage culture and the host culture (cultural dissimilarity) (Bhugra & Becker, 2005; Mesquita et al., 2017; Romero & Piña-Watson, 2017). A study examining acculturative stress in Latinx immigrants in American found acculturative stress

(increased due to cultural dissimilarity) affected family relationships, religious practices, family honour, respect and pride, and decision-making power (Bekteshi & van Hook, 2015). My study found that youth juggled two cultures simultaneously: they practiced their heritage Eastern Muslim culture in their homes, but also wanted to engage in the culture outside. Simultaneous exposure to two or more cultures can give rise to cultural identity conflict (Comănaru, Noels, & Dewaele, 2018). In a study, African American and Mexican American youth who strongly identified with their ethnic culture but struggled to achieve mainstream cultural norms and expectations at school experienced greater conflict (Phinney & Devich-Navarro, 1997). Those who were more exclusive about their ethnic identity did not experience bicultural conflict, but experienced discrimination and exclusion from mainstream culture.

I measured ethnic identity by using the 12 item MEIM scale. The mean level of ethnic identity was moderate amongst the youth in my study. Ethnic identity is a crucial attribute of the psychological health of immigrant health and ethnic minorities (Phinney, Horenczyk, Liebkind, & Vedder, 2001; Umaña-Taylor et al., 2004). Ethnic identity is a source of social support for immigrants, as it acts a buffer against depression and anxiety (Anderson & Mayes, 2010; McDonald, et al., 2005; Williams, et al., 2005). Ethnic identity is linked to other psychological measures of well-being. Stronger ethnic identity is linked to better coping ability and higher self-esteem, while weaker ethnic identification is linked to loneliness and depression (Roberts, et al., 1999). Strong ethnic identification has been linked to academic motivation and achievement among African American adolescents (Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn), and American adolescents of Mexican, Chinese, and European backgrounds (Fuligni, Witkow, & Garcia, 2005a). Roberts et al. (1999) examined the ethnic identity among American adolescents (n = 5,423) from diverse ethnocultural groups including African American, Central American,

Chinese American, European American, Indian American, Mexican American, Vietnamese American, Pacific Islander, and mixed ancestry. They found that, compared to all other ethnic groups, Pakistani youth (*n* =155) reported the highest MEIM mean score (*M* = 3.34: *SD* = 0.48). As cautioned by the authors (Roberts, et al., 1999), a closer examination of the Pakistani American youths' experiences in their multicultural environment is required before drawing any conclusions from their results. The authors further question whether the strong ethnic identity observed in this group could have been the result of close cultural ties within Pakistani communities or the negative experience from discrimination by other ethnic groups (Roberts, et al., 1999).

Through the QUAN arm of my study, I measured youth's self esteem and explored if this attribute differed by other identity markers. The mean Current Self-Esteem level was moderate in the sampled youth. Previous studies have reported an association between low self-esteem and depression among mainstream American youth and Mexican American youth (Orth, Robins, & Roberts, 2008; Orth, Robins, Widaman, & Conger, 2014). Khanlou (2004a) in her study on culturally diverse Canadian youth living in Hamilton (*n* = 550) found a moderate CSE mean score of 7.2. The author also reported a significant difference in male and female youth CSE scores. However, no association between self-esteem and parents' socioeconomic status[13] and no association between self-esteem and youths' cultural background (migrant or Canadian-born) was found. Post-migration influences such as host society's attitude towards an individual's migrant status, ethnicity, gender and socioeconomic status have been observed to lower immigrant youths' self-worth (which lowers self-esteem) (Khanlou & Crawford, 2006). Previous literature on gender differences found that compared to males, self esteem was lower and

[13] Socioeconomic status was measured using parents' employment status and education level.

depression was higher among females (Denton, et al., 2004; Robins, et al., 2002). In my study, there was no difference in self-esteem score by gender, region of birth, generation status, and household income. But the self-esteem (CSE) open-ended questions (the qualitative questions on the survey) revealed that academic success, socializing with family and friends raised immigrant and Canadian-born Pakistani youths' self esteem. The youth also reported they felt unhappy and less worthy about their lack of initiative, everyday stress and feeling depressed. Previous research has shown that higher self-esteem in youth promotes coping, improves family relationships and facilitates academic success at school (King, Boyce, & King, 1999). Higher self-esteem levels boost happiness, increase resilience and improve academic abilities in ethnic and racialized youth (Alvarez & Helms, 2001).

Resilience in the QUAN arm was determined by using the Child and Youth Resilience Measure (CYRM-12), which is specifically designed to measure resilience in ethnic minority youth experiencing adversity as it considers the cultural and contextual factors. The Child and Youth Resilience Measure has been used widely including in studies of Canadian Aboriginal youth (Ungar & Liebenberg, 2011) and Turkish adolescents in an urban city of Turkey (Arslan, 2019). The mean resilience score of the sampled youth in my study was moderate. Increased level of resilience has been associated with promoting and enhancing youth well-being and increasing effective coping to life's challenges (Zimmerman, et al., 2013). Ungar and Liebenberg (2012) argue that all factors that can potentially benefit resilience achievement in youth should be considered, for instance, the most influential person in a youths' life (such as a family member, a schoolteacher and broader community), and the intersection of culture and environment. The authors further note that access and availability of resources can help youth overcome difficult life circumstances and increase their chances of succeeding in life. The qual

arm of my study revealed key attributes of resilience that helped youth mitigate the challenges they faced. The youth used their personal strengths including being mindful, saying their prayers, and setting goals to cope with academic stress, acculturation stress and socioeconomic disadvantage. They also used the supports available to them such as their parents, relatives in Canada, schoolteachers, counsellors, the people in the mosque and settlement agencies. Resilience scores did not vary between male and female youth, between income groups or between migration groups.

Newcomer immigrant students experience increased difficulties adapting to a new school environment and meeting parental academic expectations. Immigrant youth arriving in upper high school years are triply challenged because they have to gain proficiency in English in order to graduate, develop the academic skills of the host school system (Carhill, Sua´rez-Orozco, & Pa´ez, 2008), and settle and adjust in the new country (Santiago, Gudiño, Baweja, & Nadeem, 2014). In addition to these challenges, immigrant youths' parents are often ill equipped to help them navigate the foreign educational system (Suárez-Orozco, Suárez-Orozco, & Todorova, 2008).

It has been observed that immigrant parents of Asian backgrounds tend to hold high expectations for their children to pursue university education and succeed academically (Moon & Ruiz-Casares, 2019). The parents participating in the qual arm of my study held moderate to high academic expectations for their children. While youth participating in the interviews were motivated to perform well at school, but they also felt they were obliged to do their part for their parents' hard work and sacrifices. This finding is supported by research that reports immigrant children are often well aware of their parents' motivations to immigrate (to provide their children a better quality of life) and the sacrifices made to bring them to the land of opportunities

(Fuligni, Alvarez, Bachman, & Ruble, 2005b). Additional factors influence immigrant parents' high expectations for their children, for example a decline in social class of immigrant families (Vivian, 2001) and parents' inability to secure positions in their field of training (Dean & Wilson, 2009).

In recent years income inequities between immigrant families and native-born Canadian families have widened (Hilario et al., 2014). Findings from the QUAN arm of my study showed that a greater proportion of youth born in Canada (Pakistani Canadian youth) lived in higher income households. The qualitative themes *parental survival employment* and *financial difficulties and impact on mental health* further established the quantitative findings — the link between poverty (and low income) and recent immigrants and the link between income and mental health and wellbeing. Research suggests that nearly 50% of recent immigrant families live in poverty during their first five years after arrival in Canada (First Call, 2011) and about one-third of immigrant families live in low income households in their first 10 years in Canada (Beiser et al., 2002). Recent immigrant youth and their families face underemployment and do not earn sufficient income. They also have difficulty securing adequate housing, and these challenges have an impact on their mental health (Salehi, 2010). In my study, despite the youths' parents being well educated, they were underemployed and trapped in a perpetual cycle of low wage precarious work, stress, and low income. Non-recognition of parents' foreign educational qualifications and challenges fulfilling equivalency requirements, upgrading training and education and lack of assurance of a stable income resulted in financial stress and anxiety in recent immigrant families. These findings echo previous reports that have determined racialized immigrant groups (despite comparable educational qualifications) have limited mobility in employment, face discrimination at their workplace and are ghettoized in low paying jobs and

low-end jobs (Galabuzi, 2006). Similarly, a Canadian study reported that 75% of well-educated immigrant men and women were employed in low-wage, low-skilled survival jobs (Creese & Wiebe, 2012). The following quote from a university educated recent immigrant woman of Pakistani descent living in the GTA, provides reflections of the most painful losses after immigrating to Canada: "*Loss of prosperity, the good life, and professional status*" (Khan & Watson, 2005, p. 310). Youth participants in my study talked about financial pressures and state of employment impacted their fathers, making them less engaged in their children's day to day problems and mental health needs. Youth reported their fathers were stressed and some had depression. These circumstances also resulted in greater parent-child conflicts. These findings echo findings from the Longitudinal Survey of Immigrants to Canada that reports overqualified and underemployed actively working immigrants had poorer mental health status than other immigrants after 4 years after arrival in Canada (Chen, Smith, & Mustard, 2010).

The theme *parents and intergenerational conflict* emerging from the qualitative interviews supports the literature that suggests immigrant youth become less aligned with their heritage culture over time, the acculturation gap widens, and increased misunderstanding and conflict between parents and their children occurs (Gonzales et al., 2018). Youth participating in the interviews felt there was a generation gap and cultural gap between them and their parents, and therefore, they would not share all information with them. They felt parents would not understand or would disapprove of certain things. Parents permitted activities that were safe and did not diverge too far from their cultural and religious values. A study on Asian Indian families in the USA found that as the acculturation gap increased, intergenerational conflict did too (Farver, Narang, & Bhadha, 2002). Furthermore, when there was no acculturation gap, there was less family conflict, youth self-esteem was higher, and they experienced less anxiety. My study's

qualitative interviews also showed that over time some parents had become less restrictive on some values and principles with younger children or those who were Canadian-born. Intergenerational conflicts can give rise to mental health problems such as anger, emotional misery, distress and suffering in the family (Kim, Chen, Li, Huang, & Moon, 2009; Li, 2014). When parents are available to provide their children the support they need, then reciprocally children gain their trust and feel secure (Cai, Hardy, Olsen, Nelson, & Yamawaki, 2013).

It is common for school peers to not foster appreciation and acceptance of differences present in other students who do not appear to look like themselves or speak English like themselves. New immigrant children of ethnic backgrounds frequently experience peer victimization and bullying in schools for not appearing to fit in to Canadian society (McKenney, Pepler, Craig, & Connolly, 2006). Bullying that is based on a person's ethnicity includes hurling racial taunts, insults, and making offensive references to culturally specific foods, and customs, and exclusion from mainstream group of peers (McKenney et al., 2006). Bullying portrays an imbalance of power, where the bully can be both physically and socially stronger (Carbone-Lopez, Esbensen, & Brick, 2010; Olweus, 1995). Youth participating in the qualitative interviews were bullied at school for wearing Muslim head covering, resembling terrorists, and looking too "culturally oriented" to their heritage culture society. Peer victimization and bullying can have negative and lifelong psychosocial consequences on the victim (McKenney et al., 2006), such as loneliness, low self-esteem, social anxiety, depression, and school aversion (Juvonen & Graham, 2001; Løhre, Lydersen, Paulsen, Mæhle, & Vatten, 2011).

One in five new immigrants in Canada experience discrimination (Nangia, 2013). Discrimination can be based on ethnicity, race, language, religion, and country of origin (Access Alliance, 2007; Nangia, 2013). Youth in the qual arm of my study experienced overt and

perceived discrimination in public places because of their religion, language, gender, and race. Statistics Canada (General Social Survey 2009, as cited in Nangia 2013) reports visible minorities, landed immigrants and younger persons experience higher levels of discrimination compared to non-visible minorities and older persons. As explained by the female youth in the qualitative interviews, they became targets of racial discrimination and Islamophobia because they were visibly "Muslim" (wore a head covering or wore a Muslim gear). The literature reports that racial discrimination can affect the mental health of minority youth, and undermine their psychosocial development, lead to poor academic outcomes (Umaña-Taylor & Updegraff, 2007), lowers self-esteem, and lower school bonding (Dotterer & Lowe, 2015). A systematic review of the literature has shown that immigrants and members of visible minority groups when exposed to discrimination were likely to experience a decline in health status (De Maio, 2010).

Migrants bring with them values and norms that often substantially differ from the host culture, which can subject them to subtle forms of social exclusion (Renzaho, 2009). Berry's model (Berry, 1997) explains that acculturation-related changes (such separation and marginalization) may perpetuate social exclusion and limit opportunities for some migrant groups (Renzaho, 2009). Belonging to an ethnic minority was a risk factor for exclusion by peers (Plenty & Jonsson , 2017). Different forms of social exclusion were evident in the information provided by the youth in my study. An unexpected finding that emerged from the qualitative interviews was that recent immigrant youth felt their Canadian Pakistani peers and relatives (Canadian-born and who had resided in Canada much longer) would exclude them from conversations and social activities, and were reluctant to share information with them (or intentionally hide information) that could help them in settling in Canada. Oxman-Martinez and colleagues (Oxman-Martinez, et al., 2012) found that 20% of the newcomer immigrant children

in Canada feel like an outsider, and 10% feel socially isolated and never take part in organized activities. The researchers also noted that boys experienced more psychological isolation than girls.

Stigma has been identified as a key barrier towards help seeking for mental health. Previous studies have shown that individuals who were embarrassed to seek out mental health treatment were less likely to use mental health services (Kessler, et al., 2001; Mojtabai, Olfson, & Mechanic, 2002). Both the qual arm of my study and the responses on the open-ended questions on the survey revealed that stigma (and ignorance) was a key barrier towards help seeking for mental healthcare. Both youth and parents would not disclose or discuss their mental illness diagnosis or mental health issues with others because of how the Pakistani community would view them (fear of shame). Eisenberg et al. (2009) found *perceived stigma* (stigma as perceived by others) and *personal stigma* (stigma perceived by an individual about themselves) influenced racial and ethnic minority college students in seeking mental healthcare. *Personal stigma* was higher among students who were Asian, male, those who were younger, more religious, or belonged to a poor family (Eisenberg et al., 2009). Arora and colleagues found that higher levels of *personal stigma* in South Asian male college students prevented them seeking professional psychological help (Arora, Metz, & Carlson, 2016) compared to Caucasian students (Loya, Reddy, & Hinshaw, 2010). Another study from Toronto showed that African immigrant youth associated mental health to "stigma" and "taboo" (Olawo, 2018).

Religion emerged as an important aspect of Pakistani youths' identity both in the qualitative interviews and the responses on the open-ended survey questions. The majority of Pakistani immigrants follow the Islamic faith. For Muslims, Islam is not only a religion, it is a way of life providing guidance to the believers in all spheres of their life and offering informal

mental health support and healing (Qasim & Hynie, 2019). In a multicultural society, religious identification serves to protect Muslim immigrant youth against the effects of acculturative stress and perceived discrimination (Yogasingam, 2017). The qual arm of my study revealed that following the Islamic faith and performing religious rituals such as praying "salah"[14] and reading the Quran was protective towards youths' mental health. The Islamic practices helped them manage their stress (some youth believed that they needed help beyond prayer for their mental health issues), to work diligently towards their academic goals, solve relationship problems with friends, and deal with acculturation stress. Prayer also helped youth and their parents to be patient and remain hopeful that life would get better for them. For many immigrants, and Muslim minority youth living in Western societies, religion is central to their identity and how they acculturate (Dupper, Forrest-Bank, & Lowry-Carusillo, 2015; Ysseldyk, Matheson, & Anisman, 2010).

7.2.1 Gender Differences in Mental Health and Other Attributes of Wellbeing

Findings from the QUAN arm (specifically the close-ended survey questions) did not determine gender as an important attribute affecting immigrant and Canadian-born Pakistani youths' mental health and psychological aspects of their wellbeing. There were no statistically significant differences in self-esteem, resilience, ethnic identity, and *Health Composite* between male and female youth. However, gender differences emerged in the qualitative part of the study. For example, the open-ended survey questions showed that a number of male youth reported that they would not share their mental health issues with others, while several female youth reported that they discussed their mental health issues with parents, friends and psychotherapists. Participating female youth in my study appeared to be more open for discussions on mental

[14] Islamic worship performed five times a day. It is also the second pillar of Islam.

health problems whereas male youth believed in finding solutions to their mental health issues themselves. This difference in dealing with mental health problems maybe gendered, similar to other studies in the literature. Finding from the open-ended CSE questions showed gendered differences in desirable life goals. Academic achievements and accomplishing tasks in a timely manner (being productive) was a desired accomplishment for several female youth (made them feel good about themselves) which raised their self-esteem, while quitting drugs and exercising was a desired accomplishment for some male youth (made them feel good about themselves) and raised their self-esteem. Academic achievement seemed to be of less importance to male youth in this age group. Socializing with family and saying prayers made both male and female youth feel good about themselves. Evidence suggests that young males had higher family connectedness compared to female youth (this was not found in my study), but family and school connectedness were more protective (and beneficial) for female youth in stress (Hilario et al., 2014).

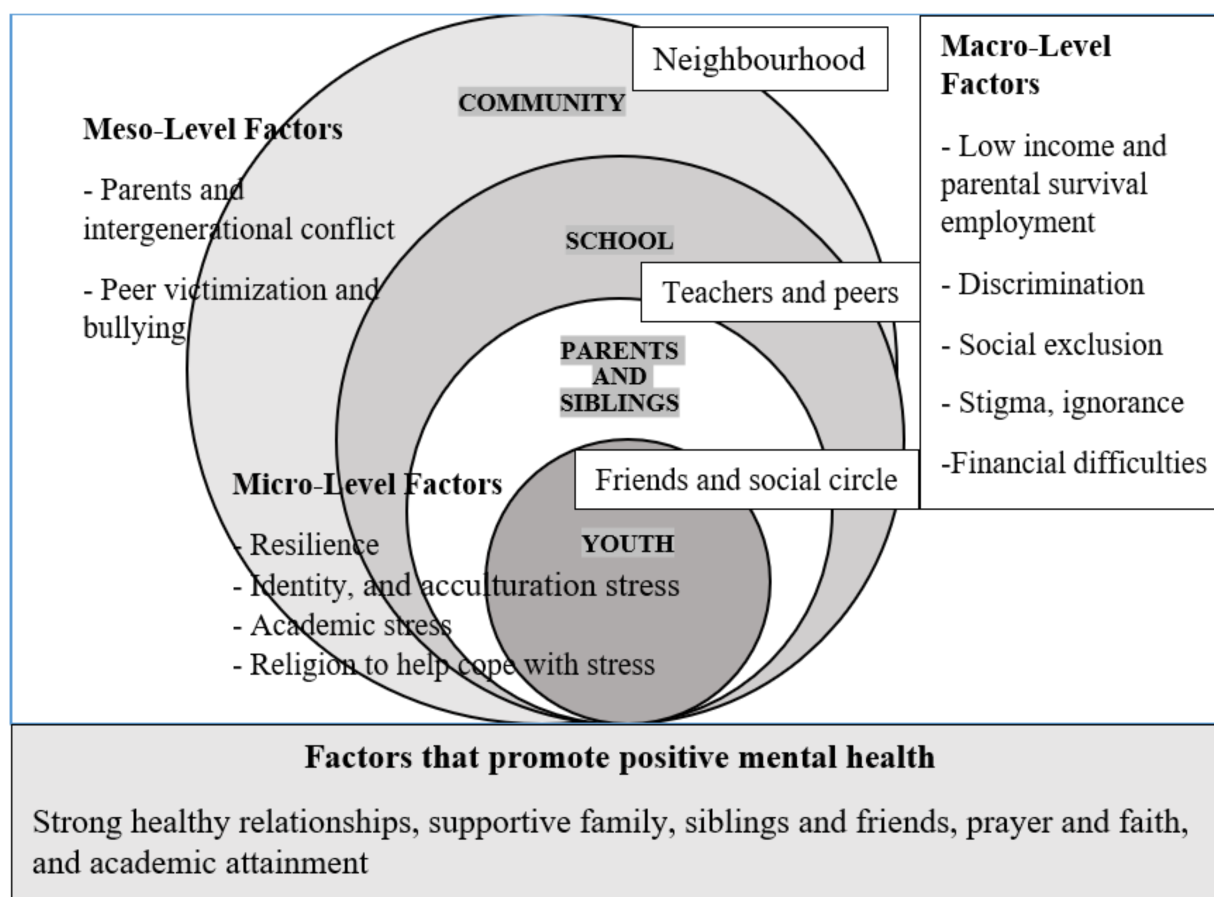
The results from the qual arm of the study found gender differences in the youths' responses. Discussions on identity and acculturation revealed that male youth were more concerned about fitting in to Canadian culture such as socializing with their Canadian peers (boys had difficulty being accepted by Canadian peers into their social circles). Whereas female youths' challenges were focussed on Pakistani cultural norms, one group wanted to abandon the hijab and overcome restrictive Muslim/Pakistani social norms, while another group wanted to promote and protect these values. Female youth also desired for more liberty to go out and socialize with friends and work colleagues. More male youth reported conflict and disagreement with their fathers' no non-sense attitude. Whereas female youth appeared to be less critical of the restrictions and discipline imposed by parents and appeared to accept and justify the limitations set by them. More female youth mentioned how they appreciated their parents sacrifices and

struggles. They were also concerned about their parents' mental health. Female youth experienced more bullying and racial discrimination compared to male youth. Primarily this was due to their conservative dressing and head covering and because they were female.

7.3: Application of Theoretical Frameworks

In this section I revisit the two theoretical frameworks described in Chapter one and discuss the findings from my study in the context of these frameworks.

Figure 8: Factors that Influence Immigrant Pakistani Youth



Factors that promote positive mental health

Strong healthy relationships, supportive family, siblings and friends, prayer and faith, and academic attainment

7.3.1: Development of the Systems Conceptual Model

Systems Perspective is a way of thinking and organizing knowledge that highlights the interconnection and interdependencies between individual and the social systems they live in

(Waller, 2001). A thematic conceptual model was developed from the findings of the qualitative data which is presented in Figure 8. It illustrates the emergent 11 themes (factors) and their relationship organized by the Systems Perspective.

Table 26 presents a comparison of the original systems model (Figure 1) and the conceptual model which emerged from this study (Figure 8). The factors (11 themes) are located at the micro-, meso-, and macro-level, and interact with the focal individual — immigrant Pakistani youth. These influences are bidirectional and intersecting. Four themes or factors interact at the micro-level namely *resilience, ethnic identity and acculturation stress, academic expectations and stress, and role of religion to cope with day to day stress.* The meso-level themes are *parents and intergenerational conflict, and peer-victimization and bullying*, and the macro-level themes are *low income and parents' survival employment, financial difficulties and impact on mental health, discrimination, stigma or ignorance, social exclusion.*

The present conceptual Systems Model (Figure 8) reinforces the original Systems Model from my COMPs scoping review (Figure 1) on the following themes and subthemes:

1. At the micro-level: resilience, identity and acculturation stress, academic expectation and stress and role of religion in coping with stress. The coping mechanism that emerged in my thesis study (mental health support through faith and prayers, setting goals, being mindful) were strength based in regards to the coping strategies identified in the original model which focussed on withdrawal approaches (anglicizing names, keeping silent and withdrawing from their ethnic identity, rationalizing jokes).

2. At the meso-level: intergenerational conflict and parent-child conflict were similar themes across the two models. Although school adjustment did not emerge as a theme in thesis

Table 26: Comparison of Themes: Systems Conceptual Models from 2 Studies (Thesis and Comprehensive Review Paper)

		Systems Conceptual Models	
		Thesis model (Figure 8)	Original model (Figure1)
1	Population	Immigrant and Canadian-born Pakistani youth	Immigrant and refugee youth
2	Sources	Interviews and focus groups	Review of the literature
3	Themes	11 themes: (given below)	3 broad themes: - Determinants of mental health - Coping and adaptation mechanisms youth adopted to adjust to the host society - Youths' perception of racism and discrimination
4	Micro-level	- *R*esilience - Ethnic identity and acculturation stress -Academic expectations and stress - Role of religion in coping with stress *(religious support-saying their prayers, setting goals, being mindful)*	- Resilience and self-esteem - Ethnic identity versus national identity - Acculturative stress - Coping and adaptation mechanisms (*anglicizing names, keeping silent, and withdrawing from their ethnic identity, rationalizing jokes)*
4	Meso-level	- Parents and intergenerational conflict - Peer-victimization and bullying	- Intergenerational conflict - Parent-child relationship (*communication, cultural differences*) - School adjustment
5	Macro-level	- Parents' settlement struggles and survival employment - Financial difficulties and impact on mental health - Discrimination - Stigma or ignorance - Social exclusion	- Perceived discrimination and racism (*language, class, race*)
6	Mental health supports	- Academic accomplishments -Prayer and faith - Supportive parents and siblings - Good relationship with friends	- Personal resources: resilience, positive self-identity, higher sense of belonging, agency and self-determination - Family stability and cohesiveness - External supports

study bullying and peer victimization are related to school adjustment issues. Participants explained that family conflict was due to persistent settlement challenges their families faced

3. At the macro-level: Discrimination and racism was reinforced in my model. The original model reported discrimination based on language, class, and race. In my thesis model discrimination based on religion emerged as a dominant theme. At the macro-level, income and employment, social exclusion and stigma emerged as factors that specifically affected immigrant Pakistani youths' mental health in Canada.

7.3.2: Social Determinants of Pakistani Youth Mental Health

Canadians generally maintain a high standard of living and the healthcare system provides access to high quality care. However, in the past two decades evidence indicates the widening health inequities among Canadians. The health inequities remain a problem of utmost concern for immigrants and other subgroups (Beiser & Stewart, 2005). The World Health Organization affirms that health inequities are not the result of lifestyle choices alone but created and sustained by the broader social and political forces. The distribution of the SDOH (the living and working conditions of people) among Canadians is determined by government decisions through various public policies (Raphael et al., 2020). The SDOH have a direct and complex relationship on patterns of morbidity and mortality throughout the life course (Marmot & Wilkinson, 2006; Raphael, 2011). People in the lower income category often have poorer health than those in the middle, and upper income categories (Chetty, et al., 2016; Marmot, et al., 1991; Stringhini, et al., 2010). In recent years immigrant populations have increasingly been the focus of attention in the field of public health (Castañeda et al., 2015). Immigrant status has been included as a SDOH of health (Raphael et al., 2020), yet a SDOH approach is seldom applied in health research and practice (Castañeda et al., 2015).

In this Chapter, I discussed the themes identified from the qual arm and the QUAN arms of my study. Nine of the 13 themes discussed represent critical SDOH that shape the mental health of immigrant and Canadian-born Pakistani youth. These nine SDOH related themes consist of income, education, unemployment and job security, employment and working conditions, health service (mental healthcare), gender, race and social exclusion and immigrant status. Youth and parents discussed the significance of geography and housing as social determinants of mental health. Housing is one of the basic necessities of life and is also a powerful SDOH. Affordable housing and geographic proximity to services emerged as a subtheme in the qual arm of the study. Income determines access to adequate and safe housing, and together they have a huge impact on the mental health of vulnerable populations such as immigrant families. The youth and parents' stories revealed that recent immigrant families had difficulty earning enough money to pay their rent. A few new immigrant families lived in accommodation they shared with relatives or other immigrants either paying their share of rent or sometimes for free. This crowded housing situation continued for several months or until they secured a job that paid enough to be able to rent their own place. Some immigrant families lived in unsafe neighbourhoods and were also robbed. Safe and affordable housing can reduce stress, improve health, mental health and ultimately reduce costs.

Race and ethnicity play an important role in determining the health status and the quality of care received by immigrant and racialized populations (Commission on Social Determinants of Health, 2008). Collection of sociodemographic data, such as gender, race, geography and immigrant status aids public and health systems to identify inequities in access to health and health outcomes. This information can enable the development of initiatives that improve equitable services for all populations. Essentially Canadian public policies and mental health

systems do not fully ensure equity of access to mental healthcare and positive outcomes for immigrant populations (Mental Health Commission of Canada, 2019). Personal resources that immigrants bring with them, such as proficiency in English along with a strong potential to access opportunities for education and career success, can leverage immigrants' upward social mobility (Portes & Rumbaut, 2001). A Social Determinants of Health approach which centers on the structural factors especially on the upstream, macrolevel social factors (aside from medical care) can have important effects on the health of immigrant families. Focussing on addressing macro-level factors identified in my study can settle immigrant youth and their families in Canada at a faster pace, and reduce the health inequities they live in, and thus improve their mental health.

7.4: Strengths of Study and Contributions to New Knowledge

To my knowledge my dissertation is the first study that examines immigrant and Canadian-born Pakistani youths' mental health through a community-based approach. My study provides important contributions in the immigrant mental health literature in the following ways: *Population*: My dissertation includes the narratives of Pakistani immigrant youth a group that has largely been left out of Canadian mental health literature. A review of the historical background, migration trajectory and statistical demographics of first and second generation immigrant Pakistani populations in Canada is key information to understanding the mental health of immigrant Pakistani youth in Canada. *Research design*: My study provides a comprehensive look at the phenomenon of interest through a mixed methods design and the use of both close-ended survey questions and open-ended questions. A novel aspect of my mixed methods study is that it applies a rigorous integration of mixed methods and provides a step by step description of the process. *New health indicator:* My dissertation contributes to the creation of a new health

indicator the *Health Composite* (and I tested the indicator in the sample of youth). This is a valuable indicator which measures mental health through four items of health rather than a single self-rated health item. *Data collection*: My study includes both parents and children in terms of insight into the youths' experiences on mental health. Participating youths' and parents' experiences were analyzed simultaneously. The parents' perspectives are equally valuable, as they can be corroborated with the youths' experiences. In addition, several youth in my study were quite young at the time they immigrated to Canada with their families, and could not relate to the settlement experiences, therefore the settlement experiences captured by parents' voices are a very valuable part of my study. *Theoretical framework:* A Systems Perspective further provides insights on the unique factors impacting the youth at the micro-, meso-, and macro-levels. The conceptual framework developed from the study findings offers a visual map to understanding immigrant and Canadian-born Pakistani youths' mental health in a multicultural immigrant receiving society. *Study findings*: An important contribution of my study is that it helps to destigmatize Islam in Western immigrant receiving countries. My study found that Islam was a significant form of mental health support for Muslim immigrant and Canadian-born Pakistani youth.

7.5: Study Limitations

This study is not without limitations. One limitation was refugee youth with an ethnic background from Pakistan were not included in my study. There were two main reasons for not doing so. First the migration trajectory of economic class immigrant differ significantly from refugees who have often lived with uncertainties of migration and settlement (Guruge & Butt, 2015; Hynie, Guruge, & Shakya, 2012), such as fleeing subjugation, war and violence in their country of citizenship (Boyden, de Berry, Feeny, & Hart, 2002) and living in refugee camps

(Heger Boyle & Ali, 2010). Secondly, refugees may present with different mental health problems as a result of their pre-migration and post-migration circumstances (Guruge & Butt, 2015).

Another limitation of my study was that sampling for the QUAN arm of the study was not random. As population estimates of the immigrant Pakistani youth population in Canada were not available, a random sample was not possible. To ensure a sufficient number of immigrant Pakistani youth were recruited to participate in the study, as opposed to representativeness, three non-random sampling approaches were used, including convenience, purposive, and snowball sampling. The study's non-random sampling was balanced by: 1) recruiting youth from a variety of populations (university and college students, high school students, youth who had recently arrived in Canada and were enrolled with immigrant serving agencies, and youth attending mosques); 2) by collecting qualitative data from three groups: youth, parents and key informants; and 3) using three methods of data collection: interviews, focus groups and surveys. The triangulation of data collection increases transferability of results.

Recruiting participants for the study was extremely challenging. The target sample of 120 youth for the surveys (the estimated sample size) could not be achieved despite of employing several recruitment approaches and due to time constraints. Recruitment efforts were therefore abandoned when 81 youth completed the survey. Fathers and Canadian-born Pakistani youths were absent in the qualitative part of my study. Only one father participated in the study. Fathers' non-participation in the study is speculative and may have been due to long hours of shift work, and hesitancy to engage in a group discussion. The voices of youth who were not in school or those working in the trades field were also not captured. Both the QUAN and qual sample was overrepresented by immigrant Pakistani-born youth. Another limitation of the study was that

some parents had difficulty explaining certain concepts in English (the parents' interviews were completed in a mix of Urdu and English). Translating the parent interview recordings from Urdu language to English text without losing the contextual and conceptual meaning was a challenging task. The audio tapes and the transcripts were meticulously re-examined and compared to ensure nothing was missed or misunderstood. However, the meaning of certain phrases and concept in Urdu language may not have been accurately captured in the transcriptions. This loss would have been small as English is the official language of instruction in educational institutions and in many public offices in Pakistan. Even though the interviews were conducted in Urdu, English was understood and used by parents during the interviews.

7.5: Conclusion and Recommendations

Efforts towards toward addressing youth mental health promotion and prevention are ongoing globally, nationally and locally. In multicultural Canada, research has been undertaken to explore the mental health of different racial, ethnic and age groups. However, the mental health of Pakistani youth (both immigrant and native born) has remained underexplored compared to youth of other racial and ethnic backgrounds. This dissertation uses a concurrent embedded mixed methods study to systematically examine the mental health of immigrant and Canadian born Pakistani youth based through a community-based study. Data was gathered from 81 youth participating in the survey, 5 focus group discussions, and 14 interviews with youth, parents and service providers. The purpose of this study was to examine the factors that influence immigrant and Canadian born Pakistani youths' mental health through the perspectives of youth, parents and service providers.

The overall findings from my study highlight the need for incorporating mental health equity in policy, provision of equitable access to Social Determinants of Health for recent

immigrant youth and their families. Special focus is needed to provide access to adequate income, employment, and opportunities and support for upgrading/equalizing educational qualifications for immigrant families. Eliminating racial, ethnic, cultural, religious discrimination may promote positive mental health in immigrant youth. Overall, the findings from my dissertation offer novel knowledge that can inform research and health and mental health policies targeting immigrant minority groups such as Pakistani youth and their families. The thesis highlights the importance of incorporating supports such as family supports, and spiritual and faith-based supports in mental health promotion programs and services.

Mental health promotion and mental illness prevention require a holistic approach to addressing the SDOH at all micro-, meso-, and macro-levels with respect to research, practice and policy. In the following sections I will discuss the research, practice and policy implications of my study findings.

7.5.1 Research Implications

Canadian-born youth did not participate in the interviews, nor was I able to recruit fathers. Future research should focus on recruiting Canadian-born Pakistani youth and older adult immigrant Pakistani men. Given the stigma associated with help seeking for mental health in the South Asian communities (Islam, Khanlou, & Tamim, 2014), research exploring stigma among Pakistani communities in Canada should be undertaken. As one size does not fit all, QUAN and qual studies examining factors that support and promote mental health in immigrant populations from low income countries, or those who identify as Muslims, need to be conducted. Questions exploring how many immigrant and Canadian-born Pakistani youth seek help for mental health problems at post-secondary institutions or through community organizations providing these services, or what type of services do they use, need to be asked.

Exploring the intersections of immigrant experiences inclusive of religion, race, ethnicity, gender, migration status, socioeconomic status among immigrant Pakistani youth can provide useful information to target mental health promotion programs for new and recent immigrants. There is also a need to examine gender-based differences in mental health across other age groups which can help determine the type of resources, service and supports to make available.

The health and mental health benefits of exercise have been consistently reported in the literature: exercise brings about physiological changes which can lower stress, elevate self-esteem and elevate mood by reducing depression (DeBoer, Powers, Utschig, Otto, & Smits, 2012), anxiety (Anderson & Shivakumar, 2013) and raise self-esteem (Mikkelsen, Stojanovska, Polenakovic, Bosevski, & Apostolopoulos, 2017). Youth in my study identified exercise as an activity that made them feel good (it raised their self-esteem), and helped them deal with academic stress, anxiety and depression. More male youth mentioned they exercised to keep healthy and to relieve their stress. Fewer girls in my study reported wanting to exercise at a gym, but they enjoyed leisure walks with friends and family. Future studies on immigrant Pakistani/Muslim youth should explore whether physical activity is equally available to Muslim girls and particularly to those who wear the hijab.

7.5.2 Practice and Policy Implications

Research has shown that addressing economic, social, cultural circumstances of vulnerable populations has the potential to reduce health inequities (Dowd, Zajacova, & Aiello, 2009; Theall, Drury, & Shirtcliff, 2012). The information gathered through the youth interviews and surveys in my study highlight the gaps in the supports and services in mental health and how these may be addressed. Below are two sets of recommendations emerging from the study which can facilitate mental health promotion (and prevent mental illness) in immigrant and Canadian-

born Pakistani youth. Table 27 illustrates these recommendations by micro-, meso- and macro-level.

Table 27: Recommendations to Improve Immigrant Pakistani Youths' Mental Health

Box Listing Recommendations that Can Increase Positive Mental Health
Micro-level recommendations 1. Promote mental health by enabling healthy habits and lifestyle 2. Integrate Islamic believes and teachings with formal and informal mental health systems
Meso-level recommendations 1. Access to support networks, support system, settlement services for youth and their families 2. Comprehensive and Geographically Accessible Services 3. Education and Information
Macro-level recommendations 1. Increase new immigrant families' access to the SDOH 2. Provision of culturally appropriate and sensitive healthcare services that suit immigrant youth and families needs 3. Availability of Therapy Options

A. Recommendations Proposed by Youth, Parents and Service Providers

The following are the responses of participants to the question "what could be done to improve the mental health of immigrant youth?"

***1. Education and Information*:** Youth and parents both suggested educating immigrant families about mental health was the primary step to promoting good mental health. A few mothers suggested that workshops and health talks on mental health and mental healthcare to educate parents can be arranged at schools, community centres or libraries.

2. Comprehensive and Geographically Accessible Services: Participating newcomer youth emphasized the need for immigrant settlement services to be geographically accessible. Youth further added that information about mental health services, settlement services, and employment

services should be available through one access point or under the same roof. The service providers said their services that were culturally and linguistically aligned were essential.

3. Availability of Therapy Options: Youth suggested strategies to alleviate stress and mitigate feelings of sadness and depression including: i) professional therapy, ii) speaking to people one trusted, iii) resiliency and coping strategies that youth could learn and adopt, iv) exercise, v) praying, reading the Quran, vi) talking to a family doctor or psychiatrist of South Asian background.

4. Support Systems: Youth spoke about the importance of social support networks in promoting mental health. A youth said *"Having a support network is important, whether it's a friend or a family member or a group of people. I think it's very important and I think it really helps as well" (FG2M1).* Another youth said: "*At the time, you need family support I think that's the biggest part and the people who don't have that kind of support they struggle a lot."* Social supports act as a coping resource that has a positive effect on self-esteem and lowers the effects of psychosocial stress (Hefner & Eisenberg, 2009). These sentiments were echoed in the open-ended survey question where several youth reported having received mental health support from parents, friends, school counsellors and teachers, but there were some youth who did not receive that support when they were in need of it. Parents believed that providing their children the support they needed was essential to maintain their mental health. Youth believed that parents could do a lot more to support young Pakistani's mental health, for example by listening to their children's viewpoint, respecting their young thoughts, understanding their struggles and supporting opportunities for their growth and development.

B. Key Recommendations Emerging from Study Findings

1***) Promote mental health by enabling healthy habits and lifestyle****:* Muslim communities in Western societies have often been critiqued for being restrictive in their dressing and movement of women and this may be one reason leading to Muslim women's and girls' lack of physical activity (Stride, 2014). Most youth in the QUAN arm of my study reported that leisure activities and pursuing hobbies, such as reading and listening to music made them feel good or they wanted to engage in the activities to feel good about themselves. One way to promote mental health is to encourage and enable both male and female immigrant youth participation in leisure and recreational activities such as involving families in hiking groups.

2) Integrate Islamic believes and teachings with formal and informal mental health systems*:* Religion emerged as an important mental health resource in the daily lives of immigrant Pakistani families in Canada. Youth engaged (and parents modelled and advised them) in prayer and recitation of the Quran to cope with stress, to draw emotional support, to elevate their spirits and to tackle challenges in their daily lives. These spiritual practices also helped them to reduce their anxiety, sadness, and depression. Traditional Islamic teachings-based models of mental health support have been utilized within informal mental health support systems. These Islamic models conceptualize the individual as a dynamic spiritual being within a collectivistic society (Rothman & Coyle, 2018)). These models are successful as among Muslim communities the religious leader may be the first line of help for mental healthcare. Qasim and Hynie (2019) found that Imams (religious leaders conducting Muslim prayers and congregations in the mosque) were indispensable community leaders who provided religious guidance in resolving family problems. They were also very accessible by the Muslim community and did not charge a fee for one-on-one counselling. Although the youth in my study did not specifically mention

seeking help from the Imams of the mosque, they found mental health support at the mosque through pre and post prayer congregations' participation and connecting with others with similar mental health issues. For many immigrants the religious institutions become locations of community support (Khanlou, Shakya, & Muntaner, 2009). Islamic beliefs and Quranic teachings can be utilized as informal mental health support systems to assist immigrant Pakistani Muslim youth and their families. Counselling services delivered through mosque Imams, one-on-one, group discussions can be effective and even life saving for individuals with suicidal thoughts.

3) Access to support networks and culturally oriented settlement services for immigrant youth and their families*:* Family and social support networks are important factors which enable immigrant youth settlement. Findings from my study show that some immigrant youth and their families had been supported by their extended family in Canada, such as some had offered them their home to stay in and others had helped them with job applications. Youth and their families who did not have extended family support in Canada utilized settlement agency support. Those who did not receive either form of support felt it took them longer to gain proficiency in English and to land their first job in Canada. Immigrant families were more comfortable contacting settlement agencies which offered services in Urdu language and were sensitive to their culture. My study findings also showed that there is need for availability of settlement programs and services for immigrants choosing to settle in smaller towns where they reunite with their extended family or relatives. As Islam was an important part of immigrant Pakistani families, resettlement work can be operationalized or made accessible through the mosque.

4) Increase new immigrant families' access to the SDOH: Limited access to the SDOH was a key issue that emerged from the data gathered from the youth and parents. Unemployment,

underemployment, and low income resulted in economic hardships for immigrant families. Physically demanding work conditions of youths' fathers, unsafe housing, non-recognition of foreign qualifications and decline in socioeconomic status influenced the mental health of the youths' families through its association with stress. There is strong evidence on the association between income and health (Subramanian & Kawachi, 2004). Proponents of fair income redistribution argue that to reduce health inequalities first non-discriminatory national policies (Mackenbach, 2011) which focus on improving societal attitudes and the social and cultural inclusion of migrants (Delara, 2016) need to be developed. Second, policies that guarantee employment for immigrating families upon arrival, programs which bridge foreign professional qualifications to Canadian requirements, and increase transferability of job skills to Canadian jobs can assist immigrant youth and their families resettle sooner and climb up the socioeconomic ladder. Improved socioeconomic status can reduce stress, anxiety, and depression.

5) Provision of culturally appropriate/sensitive healthcare services that suit immigrant youth and families' needs: Youth expressed the need for accessible services for immigrant families in which therapists can teach youth stress management and counsel families where family conflicts arise. These services can assist youth to establish rapport and bridge the cultural and generational gap with their parents. Parents and youth in my study expressed the need for mental healthcare services that were culturally appropriate and culturally sensitive. Youth who had mental health issues were hesitant about seeking mental healthcare from a health professional not familiar with or not belonging to their culture (was not Pakistani, South Asian or Muslim). These findings can inform the mental health programs at educational institutions for student counselling service

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APPENDIX A: Recruitment Flyer for Immigrant and Canadian-Born Pakistani Youth

Are **you** an Immigrant OR Canadian-born Youth of Pakistani heritage?

Are you 18-24 years old and live in the Greater Toronto Area?

Then WE would like to hear from YOU!

You can participate in our study on immigrant youth mental health and share your thoughts and experiences by:

- Completing a 10 minute on-line questionnaire at the following link https://docs.google.com/forms/d/e/1FAIpQLSe3ERWAVkrOSd5AXdYwGFzij79tqvadyAOjz5rfFao7SH3pUw/viewform?usp=sf_link
  Your email will be entered in a draw for $ 30 gift cards (3 prizes)

- Participating in a) 45-60-minute group chat
  b) 30-minute one-on-one interview
  Your participation will be appreciated with $ 25 cash gifts
  Focus group participants will be served light refreshments as well

Participation is voluntary and confidential
(your name and identity will be kept private)

For further details contact Attia Khan at

416-736-2100 Ext. 44527 or Email: attiakh@yorku.ca

This research has been approved by York University's Research Ethics Board.

APPENDIX B: Recruitment Flyer for Immigrant Pakistani Parents

Are you a Pakistani immigrant and a mother or father

Then you are invited to participate in a study about immigrant youth. We would like to know your views and experiences on mental health of youth

You will be asked to take part in an: 1) interview

2) a focus group discussion

- In appreciation of your participation, you will be offered $25
- Refreshments will be served to focus group participants

For more information contact Dr. Attia Khan
Email at attiakh@yorku.ca or call 416-736-2100 Ext. 44527

This research has been approved by York University's Research Ethics Board

APPENDIX C: Youth Survey Questionnaire

FOR OFFICE USE ONLY
Participant ID:
Site ID:
Date of administration:

DO NOT write your name or fill out the top section on this survey.

Dear participant
The purpose of this survey is to understand what affects young immigrants' mental health. The information you give will be used to improve overall health and well being of young people like yourself. There are no direct benefits of your participation.
This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines.
Completing the survey is voluntary, and if you are not comfortable answering a question, you can leave it blank or exit the survey and withdraw your participation. The results of this study may be published in a health journal and presented at health conferences. No respondent identifying data will be attached to these results.

Please be honest when you answer the questions. Your answers in this survey will be kept private and no one will know what you write.
Make sure to read every question carefully before selecting the best answer that relates to you. If you are not sure which answer to select, choose the one answer that comes closest to describing you.
Directions: Place a tick √ beside the selected answer or follow the instructions in the concerned section.
Section 1 asks questions about your back-ground, this information will only be used to describe the types of youth completing this survey. Your personal information will not be shared.

Section 1: Demographics
Below is a list of questions about you and your family. Where applicable write the answer or place a tick "√ " besides the option that best applies to you.

1.	In what year were you born? ___________________
2.	How do you identify yourself? 1. Male______ 2. Female______

	3. Other_________
3.	What country were you born? 1. Canada______ 2. Pakistan______ 3. Middle East_______ 4. England______ 5. USA_______ 6. Other, explain___________
4.	For how many years have you lived in Canada? ______________________________
6.	Select all the people that live with you in your home. 1. Mother __________ 2. Father ___________ 3. Brother/s________________ 4. Sister/s__________ 5. Grand parents_____________ 6. Other, explain________________________
7.	Which country was your mother born? ______________________
8.	Which country was your father born? _______________________
9.	What languages are spoken in your home? 1. English________ 2. French________ 3. Urdu__________ 4. Punjabi________ 5. Other languages explain _____________________________
10.	What is your highest level of education? 1. Attending high school_____ 2. Graduated from high school______ 3. Attending college______ 4. Completed college______ 5. Attending university_______ 6. Other, explain______________
11.	What is your total annual family income in Canadian dollars?

	1. Less than 30,000_________ 2. Between 30,000 to 50,000________ 3. Between 50,000 to 70,000__________ 4. Between 70,000 to 100,000_________ 5. Above 100,000______________
Section 2: Please answer the following questions related to your mental health and wellbeing	
1.	In general, how would you rate your general health as? 1. Excellent_______ 2. Very good______ 3. Good______ 4. Fair_______ 5. Poor_________
2.	In general, how would you rate your mental health as? 1. Excellent_______ 2. Very good______ 3. Good______ 4. Fair________ 5. Poor_________
3.	Emotional health problems: During the past 4 weeks, have you had any of the following problems with your school or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)? Cut down the amount of time you spent on work or other activities 1. Yes______2. No_______ Accomplished less than you would like 1. Yes______2. No_______ Didn't do work or other activities as carefully as usual 1. Yes______ 2. No______
4.	Social activities: Have emotional problems interfered with your normal social activities with family, friends, neighbors, or groups? 1. Not at all_______ 2. Slightly ________ 3. Moderately______ 4. Severe_______

	5. Very Severe _______
5.	Thinking about the amount of stress in your life, would you say that most days are 1. Not at all stressful_______ 2. Not very stressful_________ 3. A bit stressful____________ 4. Quite a bit stressful_________ 5. Extremely stressful__________
6.	Mental health concerns refer to problems you might have with emotions, attention or behaviour, or with alcohol or drugs. Have you ever received any individual or group counselling or any other help at school/college/university/clinic for concerns regarding your mental health? 1. Yes __________please explain_____________________________________ 2. No_____
Section 3A: Current Self-Esteem	
Instructions: Below is a list of statements dealing with your general feelings about yourself. Place a tick circle the best option that describes how you feel. Answer the questions 2 and 3	
1.	How have you felt about yourself over the past week? **Circle the number** that reflects how you felt. Circling number **1** indicates “didn’t feel good about myself” and number **10** indicates “felt great about myself Didn’t feel good **1 2 3 4 5 6 7 8 9 10** Felt great about myself
2.	What things you made you feel GOOD about your-self? ______________________ ____
3.	What things made you feel NOT GOOD about your-self? ____________________ ____
4.	What things can you DO TO FEEL GOOD about your-self? _______________________ ____

Section 3B: Child and Youth Resilience Measure CYRM-12

		Not at all (1)	A little (2)	Some-what (3)	Quite a bit (4)	A lot (5)
1.	I have people I look up to					
2.	Getting an education is important to me					
3.	My parent(s)/caregiver(s) know a lot about me					
4.	I try to finish what I start					
5.	I am able to solve problems without harming myself or others (for example by using drugs and/or being violent)					
6.	I know where to go in my community to get help					
7.	I feel I belong at my school					
8.	My family stands by me during difficult times					
9.	My friends stand by me during difficult times					
10.	I am treated fairly in my community					
11.	I have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)					
12.	I enjoy my community's traditions					

Section 3C: Multigroup Ethnic Identity Measure—Revised (MEIM—R)

People come from a lot of different cultures and there are many different ways to describe the different backgrounds or ethnic groups that people come from. For example, Hispanic, Black, South Asian, South East Asian, White, First Nation.

These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be___________________________
Use the number below to indicate how much you agree or disagree with each statement
4 =Strongly agree

<table>
<tr><td colspan="6">3=Agree
2=Disagree
1=Strongly disagree</td></tr>
<tr><td></td><td></td><td>Strongly agree=4</td><td>Agree=3</td><td>Disagree=2</td><td>Strongly disagree=1</td></tr>
<tr><td>1.</td><td>I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2.</td><td>I am active in organization or social groups that include mostly members of my own ethnic group</td><td></td><td></td><td></td><td></td></tr>
<tr><td>3.</td><td>I have a clear sense of my ethnic background and what it means to me</td><td></td><td></td><td></td><td></td></tr>
<tr><td>4.</td><td>I think a lot about how my life will be affected by my own ethnic group</td><td></td><td></td><td></td><td></td></tr>
<tr><td>5.</td><td>I am happy that I am a member of the group I belong to.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>6.</td><td>I have strong sense of belonging to my own ethnic group</td><td></td><td></td><td></td><td></td></tr>
<tr><td>7.</td><td>I understand pretty well what my ethnic group membership means to me</td><td></td><td></td><td></td><td></td></tr>
<tr><td>8.</td><td>To learn more about my ethnic background, I have often talked to other people about my ethnic group.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>9.</td><td>I have a lot of pride in my ethnic group and its accomplishments</td><td></td><td></td><td></td><td></td></tr>
<tr><td>10.</td><td>I participate in cultural practices of my own group, such as special food, music, or custom</td><td></td><td></td><td></td><td></td></tr>
<tr><td>11.</td><td>I feel a strong attachment towards my own group.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>12.</td><td>I feel good about my own culture or ethnic background</td><td></td><td></td><td></td><td></td></tr>
</table>

Is there anything else you would like to say? This is the end of the survey. Thank you for participating!

We would you like to hear more of your experiences and you are welcome to participate in focus group discussions and individual interviews of this study. You

can contact the researcher on the email or phone number given below if you are willing to take part in the second part of the study.

Email: attiakh@yorku.ca
Phone; (416) 736 2100 Ext. 44494

APPENDIX D: In-Depth Interview Guide with Demographics for Youth

The following semi-structured interview guide was developed to assist improved and deeper exploration of the experiences of Pakistani immigrant youth, while keeping focussed on the objectives of the study

- Introduction of interviewer (myself)
- Thank you for agreeing to participate in the study "A mixed methods study of immigrant and second generation Pakistani youths' mental health in Canada: Resilience, identity, and self-esteem." The purpose of the study is to investigate the perspectives and experiences of mental health in a sample of Pakistani immigrant youth and to also examines the role and relationships of mental wellbeing constructs of self-esteem, resilience, and ethnic identity in the context of their family and environment.
- The information you provide us will remain completely confidential, and we will not associate your name with anything you say in the interview.
- I would like to audio-record the interview so that we can make sure to capture the thoughts, opinions and ideas we hear from you. No names will be attached to the interview and the audio tapes will be destroyed as soon as they are transcribed.
- You may refuse to answer any question or withdraw from the study anytime.
- If you have any question now or later about the consent form or the interview you can contact me or a study team member listed on your copy of consent form.
- Please sign the second page of the consent form to show you agree to participate in the interview.
- Please also fill out the demographic sheet and hand it back to me.

Demographic Information Question for Youth

1. When were you born? ____________________ What is your age? __________________
2. Where were you born (city and country)? ____________________________________

3. In what year did you immigrate to Canada? ______________________________

4. What is your gender? Male _____female ____

5. Where were your mother born? ____

6. Where was your father born? ____

7. What is your highest level of education? ____

8. What is your field of study? ____

9. How old were you when you first migrated to Canada? __________________________

10. What was your parents' occupation before coming to Canada?

    Mothers occupation__________________________

    Fathers occupation__________________________

11. What is your occupation? ____

12. What is your mother and father's occupation in Canada? ____________________________

Semi-Structured Interview Questions for Youth

1. Can you tell me about your-self?

Hint: Where were, you born? When did you or your parents immigrate to Canada? What were you doing before you came to Canada? What do you do now?

2. Can you tell me about your family?

Hint: Who do you live with? What was is your parents' profession before and after immigration? How many people in the family work? What type of home do you live in, rental or owned? How is the neighbourhood? How was it before you migrated to Canada?

3. What, in your opinion is good mental health? What factors are essential for mental health?
4. What are your beliefs regarding mental illness and its causes?
5. How do you feel about your health?
6. What are the mental health problems in youth in your community?
7. What circumstances and relationships (in the family, home, school or neighbourhood) affect young people's mental health?
8. How do you feel your health was before you moved to Canada?
9. Have any of your family members had any mental health problems in the past? Now? If yes, where did they go for help? Were there any difficulties in seeking the treatment?
10. What do you think could be done to improve the mental health of immigrant youth?

Those are all the questions I have for you today. Thank you very much for your time.

End of interview.

APPENDIX E: In-Depth Interview Guide with Demographics for Parents

The following semi-structured interview guide was developed to assist improved and deeper exploration of the experiences of Pakistani immigrant youth, while keeping focussed on the objectives of the study

- Introduction of interviewer (myself)
- Thank you for agreeing to participate in the study "A mixed methods study of immigrant and second generation Pakistani youths' mental health in Canada: Resilience, identity, and self-esteem." The purpose of the study is to investigate the perspectives and experiences of mental health in a sample of Pakistani immigrant youth and to also examines the role and relationships of mental wellbeing constructs of self-esteem, resilience, and ethnic identity in the context of their family and environment.
- The information you provide us will remain completely confidential, and we will not associate your name with anything you say in the interview.
- I would like to audio-record the interview so that we can make sure to capture the thoughts, opinions and ideas we hear from you. No names will be attached to the interview and the audio tapes will be destroyed as soon as they are transcribed.
- You may refuse to answer any question or withdraw from the study anytime.
- If you have any question now or later about the consent form or the interview you can contact me or a study team member listed on your copy of consent form.
- Please sign the second page of the consent form to show you agree to participate in the interview.
- Please also fill out the demographic sheet and hand it back to me.

Demographic Information Questions for Parents

1. When were you born? ____________________ What is your age? __________________

2. Where were you born (city and country)? ____________________________________
3. In what year did you immigrate to Canada? _____________________________
4. What is your gender? Male _____female ____
5. What is your highest level of education? _______________________________________
6. What is your field of study? ____
7. How old were you when you first migrated to Canada? _________________________
8. What was your occupation before you came to Canada?
9. What is your occupation now? ____

Interview Questions for Parents

1. Can you tell me about your-self?

Hint: Where were, you born? When did you immigrate to Canada? What were you doing before you came to Canada? What do you do now? How many people live in your household?

2. How many people in the family work? What type of home do you live in, rental or owned? How is the neighbourhood? How was it before you migrated to Canada?
10. What, in your opinion is good mental health? What factors are essential for mental health?
11. What are your beliefs regarding mental illness in young people from and its causes?
12. How do you feel about your child's mental health?
13. What are the mental health problems of youth in the Pakistani community?
14. What circumstances and relationships (in the family, home, school or neighbourhood) affect young people's mental health?
15. How do you feel your health was before you moved to Canada?
16. Have any of your family members had any mental health problems in the past? Now? If yes, where did they go for help? Were there any difficulties in seeking the treatment?
17. What do you think could be done to improve the mental health of Pakistani immigrant youth?

Those are all the questions I have for you today. Thank you very much for your time.

End of interview

APPENDIX F: In-Depth Interview Guide with Demographics for Service Providers

The following semi-structured interview guide was developed to assist improved and deeper exploration of the experiences of Pakistani immigrant youth, while keeping focussed on the objectives of the study

- Introduction of interviewer (myself)
- Thank you for agreeing to participate in the study "A mixed methods study of immigrant and second generation Pakistani youths' mental health in Canada: Resilience, identity, and self-esteem." The purpose of the study is to investigate the perspectives and experiences of mental health in a sample of Pakistani immigrant youth and to also examines the role and relationships of mental wellbeing constructs of self-esteem, resilience, and ethnic identity in the context of their family and environment.
- The information you provide us will remain completely confidential, and we will not associate your name with anything you say in the interview.
- I would like to audio-record the interview so that we can make sure to capture the thoughts, opinions and ideas we hear from you. No names will be attached to the interview and the audio tapes will be destroyed as soon as they are transcribed.
- You may refuse to answer any question or withdraw from the study anytime.
- If you have any question now or later about the consent form or the interview you can contact me or a study team member listed on your copy of consent form.
- Please sign the second page of the consent form to show you agree to participate in the interview.
- Please also fill out the demographic sheet and hand it back to me.

Demographic Information Questionnaire for Service Providers

18. When were you born? ____________________ What is your age? __________________
19. Where were you born (city and country)? ____________________________________

20. In what year did you immigrate to Canada? ______________________________

21. What is your gender? Male _____female ____

22. What is your highest level of education? ____

23. What is your field of study? ____

24. How old were you when you first migrated to Canada? __________________________

25. What was your occupation before you came to Canada?

26. What is your occupation now? ____

Interview Questions for Service Providers

1. Can you tell me about your agency and your work with Pakistani immigrant youth?
1. What services are your primary focus?
2. How many Pakistani youth has your agency served?
3. What are the mental health issues and concerns for Pakistani Canadian youth?
4. What are their unmet needs?
5. What resources and services are available and accessible in the community for them?
6. What are the opportunities and what are the challenges in providing services to these youths?
7. What kind of support and services are most commonly accessed by Pakistani youth?
8. How do immigrant youth find out about your services? (Web, inquiries, advertising, referrals, word-of-mouth)
9. Are there any other suggestions you would like to provide? Thank you very much for your time.

End of interview

APPENDIX G: Focus Group Guide for Youth

Please read and complete the consent form and the questionnaire. The consent form explains the purpose of this study. Respect each other's privacy and do not discuss with others what will be said here. Please note the discussion will be tape-recorded.

Please be assured, no names or any identifying information will be recorded or transcribed. The information you give us will be well protected. All tapes will be destroyed at the end of the study.

I would like to ask you a few questions about your personal experiences or your parents experiences as an immigrant in Canada.

1. What kinds of things are most challenging for immigrant families like yours when they come to Canada?
2. What helped you to overcome these challenges?
3. What do you think a young person needs to grow up healthy in mind and body?
4. What does being mentally healthy mean to you?
5. What kind of mental health issues or problems do people your age in your community have?
6. What do you *need to know and do* to keep mentally healthy?
7. What do you do when you face difficulties in your life? Where do you seek help? Whom do you talk about it?
8. Do you know of places or services where people with mental health problem can go for help?
9. What are the difficulties in getting to these services for people your age and in your community?

APPENDIX H: Focus Group Guide for Parents

Please read and complete the consent form. The consent form explains the purpose of this study. Respect each other's privacy and do not discuss with others what will be said here. Please note the discussion will be tape-recorded.

Please be assured, no names or any identifying information will be recorded or transcribed. The information you give us will be well protected. All tapes will be destroyed at the end of the study.

I would like to ask you a few questions about your experiences as an immigrant family with children in Canada

1. What were the most challenging things for you and your family when you first arrived in Canada?
2. What helped you to overcome these challenges?
3. What do you think young people need to grow up healthy in body and mind?
4. What does mental health mean to you?
5. What kind of mental health issues or problems do young people have in your community?
6. What do they need to know and do to keep mentally healthy?
7. What do young people do when they face difficulties in your life? Where do they seek help? Whom can they talk to?
8. Do you know of places or services where young people with mental health problem can go for help?
9. What are the difficulties in getting these services for young people?

APPENDIX I: Informed Consent to Participate in the Research Study

Study title: A mixed methods study of immigrant and Canadian-born Pakistani youth mental health in Canada: Resilience, identity and self-esteem

Researcher's name: Dr. Attia Khan, Doctoral candidate
Graduate Program in Health
Email: attiakh@yorku.ca
Phone; (416) 736 2100 Ext. 44494

Introduction:

Before agreeing to take part in this research study, it is important that you read the information given below. It includes details we think you need to know to decide if you wish to take part in the study. If you have any questions, ask the principal investigator. Your participation in this research is voluntary and will not affect your relationship with your community/organization//school. You have the choice of not answering any questions, if you don't feel comfortable in answering.

If you have any general questions about this study or your role in the study you may contact the researcher (Principal Investigator), the research supervisor or the graduate program office mentioned below:

Graduate Program Office

School of Health Policy and Equity
HNES 409, 4700 Keele Street, Toronto, ON
Health, Nursing & Environmental Studies Building
Phone (416) 736 2100 Ext. 44494
Email: gradhlth@yorku.ca

Supervisor

Dr. Nazilla Khanlou
Women's Health Research Chair in Mental Health Office,
Faculty of Health, York University
270 York Lanes, 4700 Keele St. Toronto, ON
Email: nkhanlou@yorku.ca
Phone: (416) 736 2100 Ext. 20166

Purpose of the Research:

In this study, I will investigate the perspectives and experiences of mental health among Pakistani immigrant youth living in Toronto. The study also aims to find out if Pakistani immigrant youth are healthy, resilient to settlement stress, and do certain characteristics such as self-esteem and ethnic identity protect their mental health. This study hopes to identify barriers to mental healthcare, and the resources that can enhance immigrant youth mental health and well being. The responses you provide to the questions are valuable and will be used to improve youth wellbeing, at personal, family and societal level. This will help to raise youths' success and achievement in all aspects of life. The findings of the study will also identify gaps in health and social services for youth.

You are being recruited to participate in a survey, a group discussion, and an interview (telephonic, or face to face) concerning the health and social challenges immigrant youth and families face on arrival in Canada. One hundred and twenty immigrant youth of Pakistani origin from the Greater Toronto Area are being recruited for this study. If you agree to participate in this study, you will be asked to complete a 5-10-minute on-line questionnaire about yourself and your mental health. Furthermore, you will be invited to participate in a 60-minute group discussion and a 30-minute one-on-one interview with an interviewer to obtain your personal experiences, thoughts, feelings, and concerns about mental health. There will be no direct benefit for your participation.

Description of the Research:

After indicating your interest in the study, you can ask for further details about the study. I will obtain your consent if you wish to proceed with the study. The interviewer (myself) will arrange a time for the interview or group based upon your schedule. The one-on-one interview and group discussion 60 minutes will be conducted using an interview guide. All interviews will be audiotaped and eventually transcribed. All forms of identifying data and statements will be removed to protect your confidentiality.

Potential Harms:

It is possible that you may feel uncomfortable about discussing some of your thoughts and opinions in-depth. However, all your responses will remain anonymous and confidential, thus minimizing any potential harm, and you do not have to answer any questions that make you feel uncomfortable. If you experience any distress during or after the interview, you can contact:

1) The principal investigator for further resources 2) The Nexus Youth Services (for youth residing in Peel) by calling 905-451-4655 or go in person to Nexus Youth Centre inside the Mississauga Central Library (301 Burnhamthorpe Rd West) on the second floor 3) East Metro Youth Services (EMYS) by calling 416-438-3697 or go in person to 'what's up' walk-in® Clinic at 1200 Markham Road, Suite 200 (Corner of Markham and Ellesmere) Scarborough.

Potential Benefits:

Your participation will help us better understand the mental health challenges for immigrant youth and their families, to identify the gaps in care and what resources may be mobilized to address the challenges. However, there are no direct benefits of your participation

Protecting Your Information:

Your responses will be kept confidential and will only be disclosed with your permission. Audio-tapes of your interview will be kept securely on a password protected computer in a locked office, only accessible to the principal investigator. Once all interviews have been conducted and transcribed, your audiotape will be destroyed, however the collective study data will be retained for 5 years using the same secure method, and then destroyed. The transcript of your discussions will not contain your name and any other identifying information. Other than the research team directly connected to this study, the only other individuals who would have access to your responses would be the Research Ethics Board at York University, who would do so to monitor the study. If you choose to withdraw from the study at any time, your information will be destroyed immediately. Confidentiality will be provided to the fullest extent possible by law.

Study Results:

The results of this study may be published in a health journal and presented at health conferences. No respondent identifying data will be attached to these results.

Participation and Withdrawal:

Participation in this research study is voluntary and you can withdraw/terminate participation at any time or refuse to answer any question during the interview. If you choose not to participate, there will be no impact on your relationship you have with the researcher or study staff, or the nature of your relationship with York University either now, or in the future.
This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the

Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, you may contact the Senior Manager and Policy Advisor for the Office of Research Ethics, 5th Floor, York Research Tower, York University, telephone 416-736-5914 or e-mail ore@yorku.ca

I ____ consent to participate in the study: A Mixed Method Study to Immigrant and Second Generation Pakistani Youths' Mental Health in Canada: Resilience, Identity, and Self-Esteem conducted by Attia Khan. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

____________________________ ________________________

Signature of participant Date

_____________________________ _________________________

Signature of Principal Investigator Date

APPENDIX I: Summary Table of Multigroup Ethnic Identity Measure (MEIM) Items

No.	Question Item	Strongly disagree (%)	Disagree (%)	Agree (%)	Strongly agree (%)
1	Feel good about culture and ethnic background	2.4	2.4	41.5	52.5
2	Feel strong attachment towards my group	19.5	32.5	46.3	1.2
3	Practice cultural practices of my group	2.4	11	41.5	42.7
4	Pride in ethnic group	7.3	13.4	41.5	36.6
5	Talk to others about my ethnic background	1.2	19.5	35.4	42.7
6	Understand group membership	0	14.6	46.3	37.8
7	Strong sense of belonging to group	3.7	13.4	43.9	37.8
8	Happy to be member of group	3.7	4.9	42.7	46.3
9	Think how my life is affected by group	1.2	15.9	43.9	37.8
10	Clear sense of ethnic background	1.2	9.8	45.1	42.7
11	Active in social group with mostly my own ethnic group	9.8	29.3	39	19.5
12	Spend time to learn about my group	0	19.5	57.3	22

APPENDIX J: Summary Table of Child and Youth Resilience Measure CYRM-12

No.	Question Item	Not all (%)	A little (%)	Somewhat (%)	Quite a bit (%)	A lot (%)
1	I have people I look up to	3.7	13.7	14.8	19.8	48.1
2	Getting an education is important to me	0	1.2	3.7	6.2	88.9
3	My parent(s)/caregiver(s) know a lot about me	0	4.9	19.8	17.3	58
4	I try to finish what I start	2.5	6.2	8.6	17.3	65.4
5	I am able to solve problems without harming myself or others (for example by using drugs and/or being violent)	3.7	4.9	7.4	4.9	79
6	I know where to go in my community to get help	11.1	4.9	17.3	13.6	51.9
7	I feel I belong at my school	4.9	11.1	12.3	14.8	56.8
8	My family stands by me during difficult times	3.7	4.9	13.6	16	61.7
9	My friends stand by me during difficult times	1.2	6.2	13.6	12.3	66.7
10	I am treated fairly in my community	0	6.2	12.3	19.8	61.7
11	I have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)	1.2	3.7	12.3	14.8	67.9
12	I enjoy my community's traditions	3.7	6.2	16	12.3	61.7