An Exploratory Study of COVID-19 in Brampton's High Priority Community

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An Exploratory Study of COVID-19 in Brampton's High Priority Community

This report's research was conducted over twelve days in January 2021 by the dedicated research team at The Social Planning Council of Peel (SPCP). Under the supervision of Principal Investigator, Dr. Srimanta Mohanty, the concerted effort of many, including practicum students from Ryerson University (RyeU), Sheridan College Institute of Technology and Advanced Learning, University of Guelph-Humber (UofGH), University of Toronto Mississauga (UTM), and York University (YU) has contributed to this comprehensive data collection and analysis.

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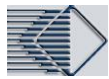Jessica Trac, Shamini Vijayakumar, Vishali, Hamza Wardak

Table of Contents

The Social Planning Council of Peel

List of Tables

List of Figures

Acknowledgements

Executive Summary

With global impacts of the COVID-19 pandemic felt worldwide, 2020 was an incredibly challenging year for everyone. Canada is no exception. The steep rise in positive cases has been a primary ongoing concern for governments, provinces, and municipalities across the country. Peel Region's most recent data shows that despite having only a 31.6% share of the Peel population, Brampton contributes 61% of Peel's total cases (Region of Peel COVID-19 Dashboard, 2021), with South Asians currently accounting for 58.7% of the total COVID-19 cases (Region of Peel, 2021). These startling numbers highlight the unique vulnerability of the South Asian community. The Brampton community has a significantly higher rate of COVID-19 compared to other areas in the Peel Region. In this report, the Brampton community pertains to two forward sortation areas specifically - L6X & L6V. Between 20/02/23 and 21/01/30, the COVID incident rate for L6V was 4,923 per 100,000, and the COVID incident was for L6X was 6.030 per 100,000), respectively. In 2010, those two areas were identified as medium priority in terms of service needs in Peel Region (Mohanty, 2010). In the current pandemic, those two areas moved from medium priority to high priority service needs in Peel Region. Given its current demands, the decision was made to undertake a Community Needs Assessment in Brampton's high priority communities. The assessment was conducted by the Social Planning Council of Peel (SPCP) and sponsored by Punjabi Community Health Services (PCHS).

Study Objectives, Community Consultations and Information Management

This assessment aims to promote access to COVID-19 related services (including testing, isolation centres, income, and food supports), reduce overall COVID-19 prevalence and develop a resource hub for the Brampton community. This report summarizes the assessment of the Brampton community's understanding of and compliance with public health measures; awareness and access to testing and support; and overall understanding of the impacts of COVID-19 on residents' socio-economic status. The assessment began on January 18, 2021 and was completed on January 30, 2021. While faced with these time constraints, a dedicated team of 28 SPCP researchers provided reliable, participatory action-oriented research. This report presents findings and recommendations for improving awareness of and access to testing and support, increasing testing rates, and increasing referrals to services and supports that enable safe and effective isolation. These findings and recommendations were obtained through consultations with residents, services providers, practitioners, health care providers, students, community partners and PCHS executive management staff, as well as official and reliable documents from various sources. Primary data was collected through the online surveys of 111 respondents/households (approximately 400 persons), 16 key informant interviews and 4 focus groups. We were sensitive to the Ontario government and local public health guidelines, and the cultural norms and practices in the neighbourhoods where the research was carried out. This assessment also incorporates documented evidence of peer-reviewed and grey literature through multiple databases and academic search engines; internet searches; and the bibliographies of known conference proceedings and papers. Both quantitative (e.g., taxonomic method, correlation analysis, etc.) and qualitative (e.g., text analysis, photovoice, etc.) data analysis techniques were used in this study.

Key Findings

Socio-economic and Cultural Characteristics of the Brampton Community[1]

Brampton community's population is growing at a faster rate than Peel. Between 2016 and 2018, the Brampton community's population grew by 11% compared to 8.5 % in Peel.

Brampton community is more racially diverse than Peel. Brampton community had 65% of its population reporting themselves as racial minorities, compared to 62.3% in Peel.

Use of the taxonomic method of analysis shows that the Brampton community has the medium socio-economic status, followed by Bramalea, Northwest Mississauga, East Mississauga, and Malton, respectively. The literature also points to socio-economic status as a significant contributor to the high rates of COVID-19 in the L6X and L6V areas in Peel. It is well documented that those with lower socio-economic status are at a higher rate of contracting diseases (Rangel et al., 2020). In 2016, Brampton community had a higher unemployment rate than Peel.

Multiple barriers and gaps exist for marginalized community members, particularly the predominantly South Asian population (e.g., precarious employment and overpopulated households).

Survey participants reported relatively good levels of education, with the majority of participants belonging to the South Asian community. Despite their relatively good education levels and ability to speak English, the majority reported working in low-income jobs. Among survey participants, many are working part-time, possibly due to reduced work hours. Those employed report pressure to keep working along with unrealistic time constraints and inadequate support from employers.

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[1] For the purposes of this report and information discussed herein, "The Brampton Community" will refer to the Forward Sortation Areas (FSAs) of L6V and L6X

COVID-19 Issues and Challenges in the Brampton Community

COVID-19 Transmission: Includes meeting increased demands for all COVID-19-related services (especially testing, awareness programs, PPE, transportation, employment, health services, support for seniors and social services); lack of prevention measures and supports related to isolation centres; Members of multigenerational or overpopulated households unable to adequately self-isolate; Misinformation about the disease and the efficacy of vaccines; Testing as it pertains to convenience, accessibility and availability of paid sick leave to encourage more people to get tested; and the knowledge that COVID-related delays in immigration services are leading to additional problems obtaining health care.

Employment: The issues and challenges regarding employment were many, and financial barriers for low-income earners were cited frequently, expressing needs for increased financial assistance and support. Among the variety of employment issues reported were no access to paid sick leave (required to encourage COVID-19 testing and reduce transmission; inability to work from home (due to nature of employment for essential/frontline workers); increased demand for employment training, and childcare subsidies, etc.

Mental Health: A majority of the participants reported higher levels of stress in their daily lives due to COVID-19 and the need for improved access and availability to mental health services, especially for overburdened individuals tasked with a disproportionate division of labour (often due to gender and cultural inequalities).

Language Barriers: COVID-19 information is not readily available in unofficial languages, and there is an increased demand for culturally appropriate services.

Severely Affected Groups during COVID-19: Further correlation analysis and literature review of the basic findings of the study indicates that the most vulnerable groups among the residents of Brampton Community are: women; the elderly; unemployed persons; racialized groups (especially South Asians); immigrants; newcomers; persons living in accommodations unsuitable for social distancing and self-isolation; 5 or more persons living in a household; persons with no certificates or diplomas; persons with trades, transport and equipment operators and related occupations; persons with working in transportation and warehousing industries; truck drivers; and people who do not speak English or French. Also noted were international students struggling to navigate without adequate social and financial support.

Recommendations

1 **Increased Awareness of COVID-19:** The issue of lack of awareness came up many times during the online survey, focus group discussions and key informant interviews. The main concern was not only lack of available information but was how information was being presented. To better reach out to greater numbers of people, information related to COVID-19 precautionary measures should be provided in community residents' native languages. These messages must be clear and culturally relevant.

2 **Actively Work Towards Clearing Misinformation:** Since the pandemic first rose into global prominence, there has been an overwhelming amount of misinformation surrounding COVID-19, its transmission and recommended preventive practices. An information session within the community on debunking myths and misinformation will raise awareness and help people better understand the issue and follow best practices.

3 **Mental Health Services:** Mental health impacts due to physical distancing and stay at home guidelines were widely reported. Many people are anxious, overwhelmed and living in a constant state of worry and fear. Others are all alone, dealing with social isolation and depression. The stressors are many, including concerns about getting sick or about losing loved ones and fear of losing jobs or accommodation. Parents are reporting higher stress levels than ever; this concern is especially true for lone-parent families. In general, women reported dealing with a disproportionate amount of mental health challenges when burdened with an often-unequal division of labour and overwhelmed with an inordinate number of responsibilities. Increased mental health supports are needed to combat these growing mental health concerns, with particular attention to providing gender and culturally responsive services.

4 **Use of Social Media:** Social media will help propagate information and guidelines related to COVID-19 and ensure important, timely information reaches the masses. The information about COVID-19 screening procedures through social media will help many struggling to navigate through the process.

5 **Employment Standards:** Essential workers employed in transportation, warehouses, supermarkets and distribution centres are at high risk of contracting and transmitting COVID-19. There should be regular inspections of these workplaces to ensure safety protocols are in place and accessible. Paid sick days and workplace policies to encourage employees to access COVID-19 testing and adhere to quarantine regulations are also needed.

6 ### Community Development and Service Provision during COVID-19:
Brampton community should involve the people that the residents trust and rely on for support (immediate family, friends, relatives, family doctors, etc.). As was mentioned earlier in this report, care must be taken to ensure that the services provided to the Brampton community residents are relevant for their needs and delivered in a manner (content and form) that is culturally appropriate for them. Based on the top priorities among survey respondents, the following services should be provided immediately: health, income supports, employment, food/meals, and information services. A resource hub for the Brampton community should be created to facilitate residents' access to information/services.

7 ### Increase Service Collaboration within the Brampton Community:
Collaboration is essential, especially among organizations offering COVID-19 related services and those serving South Asians in the L6V and L6X areas. Service providers should provide programs, resources and services related to COVID-19 in a variety of languages and have translators available when appropriate. Feedback should be obtained from our residents and clients to ensure services are being delivered in a culturally appropriate manner. At the macro level, the Canadian government should encourage open communication between institutions, provinces, and municipalities to eliminate citizens' challenges effectively.

For planning and communication purposes, this report identifies the strengths and challenges of the Brampton community residents (L6V & L6X). The information contained in this report for COVID-19 data (testing & positivity rates) is based on the January 25th Ontario Laboratory Information System (OLIS) provided by PCHS. This information should be used in conjunction with other relevant health information about the Brampton community and surrounding environments. While it is hoped that this report will prove an instrumental tool for change and development in the Brampton community, SPCP also recognizes that COVID-19 is a complex and evolving issue, unequally affecting marginalized groups; and as such, it is recommended that ongoing study and continued research efforts are undertaken and explored.

1. Introduction

1.1 Social Policy Relevance of the Assessment

According to the COVID-19 prevalence data and the Ontario Marginalization Index, 10 high priority communities in the Central Region of Ontario were identified (6 in Peel, 2 in York and 2 in Toronto). Given its current demands, the decision was made to undertake a Community Needs Assessment in Brampton's high priority communities. Punjabi Community Health Services (PCHS) has been responsible for the development and implementation of the local health strategy for the Brampton Community. The purpose of the health strategy is to reduce overall COVID-19 prevalence in the Brampton Community, with specific attention to the L6V and L6X forward sortation areas (FSAs) (forward sortation areas, or the first three characters in a Canadian postal code). The assessment was conducted by the Social Planning Council of Peel (SPCP).

1.2 Social Policy Relevance of the Assessment

- ✓ Valuing Diversity (Equity, Access, etc.)

- ✓ Developing Socially Inclusive Communities

- ✓ Building Healthy Communities

- ✓ Building Community Capacity

- ✓ Investing in At-Risk Neighbourhoods

1.3 Purpose of the Assessment

This assessment aims to reduce the overall prevalence of COVID-19 in Brampton's high priority community and contribute to developing a resource hub for the Brampton community.

1.4 Objectives of the Assessment

1. To improve understanding of and compliance with public health measures.

2. To increase awareness and access to testing and support.

3. To increase testing rates.

4. To increase referrals to services and supports that enable safe and effective isolation.

5. To understand the impact of COVID-19 on the socio-economic status of residents in the Brampton community.

6. To provide reliable and relevant social and health planning statistics, measurement tools and health services for the Brampton community.

7. To suggest COVID-19 related interventions that might work in prevention and treatment in the Brampton community.

8. To promote access to COVID-19-related services (including testing, isolation centres, income supports, food supports, etc.)

1.5 Major Research Questions

What are the major risk factors related to COVID-19 faced by the Brampton community?

What are the socio-economic and health characteristics of the residents in the Brampton community?

What are some of the best practices for being proactive in addressing the major health issues and challenges relevant to COVID-19 faced by Brampton community residents (L6V & L6X)?

1.6 Main Audience for the Assessment

The primary audience for this study is service providers in the Brampton community, particularly those providing COVID-19 related services to South Asians as well as those serving immigrants and newcomers. The information provided is intended to improve the delivery of COVID-19-related services to Brampton's South Asian population while supporting the development of community strategies to reduce the incidence of COVID-19 among this and other marginalized groups within the Brampton community. Some of the findings in this report may also be useful for policymakers in Peel and beyond, as well as at-risk individuals personally impacted by COVID-19.

1.7 Organization of the Report

This report has been organized into six sections. The introductory section provides background information relevant to the content of the assessment. The second section then provides a critical overview of the current literature on COVID-19 in the Brampton community. The third section describes the methodology that was used to obtain the information conveyed in this assessment. The fourth section includes information on the findings from primary sources. The fifth section consists of secondary source findings, while the final section provides recommendations based on the information presented in previous sections.

2. Literature Review

In January of 2021, SPCP conducted secondary research to identify studies and literature related to COVID-19 prevalence in Brampton, Ontario, and other similarly impacted regions and communities, with a focus on the experiences of marginalized and racialized groups and interventions that can reduce the spread of COVID-19. The findings are categorized into the following topics:

Underfunded Healthcare, Socio-Economic Status, High-Risk Employment, Intergenerational Households, Patterns of Mobility, Cultural Factors and Approaches, Communication Strategies, Mental Health, and Government Restrictions.

2.1 Introduction

The objective of this review is to identify and analyze factors contributing to the disproportionately high number of COVID-19 cases in Brampton, particularly the high priority L6V and L6X neighbourhoods, and to suggest recommendations to reduce the prevalence of COVID-19 in these areas. Factors uncovered include systemic and socio-economic barriers as well as cultural status inequalities. This review establishes how marginalization, socio-economic status, and systemic oppression play pivotal roles in the transmission of COVID-19 and discusses how these issues impact a community's ability to follow guidelines, access healthcare and implement successful interventions. Furthermore, it highlights strategies for reducing the high number of COVID-19 cases in Brampton and overcoming challenges within the community, particularly amongst Brampton's predominantly South Asian, Black and Filipino populations. While the research uncovered cultural factors contributing to the prevalence of COVID-19 in this community, it also challenges the dominant discourse that Brampton's disproportionate number of COVID-19 cases are due to these factors alone and suggests that the prevalence of COVID-19 in this area is related to the complex interplay of underlying systemic factors and social inequalities. This study is an example of how secondary research can be carried out to suggest tailor-made and culturally responsive interventions to bring awareness to and reduce the prevalence in Brampton's high priority neighbourhoods and confirms that the prevention strategies currently in place and supporting Brampton's high priority neighbourhoods require further research, funding and development.

2.2 Sources of Literature

Reports and publications were found in peer-reviewed and grey literature through multiple databases and academic search engines; internet searches; the bibliographies of known conference proceedings and papers. Studies were reviewed against a set of inclusion criteria, and those that met these were explored in more depth.

2.3 Findings

2.3.1 Underfunded Healthcare

Standing at the forefront of barriers to successfully preventing and responding to the complex health challenges associated with COVID-19 is Brampton's underfunded healthcare system. Throughout the COVID-19 pandemic, the historical underfunding of the city's healthcare services has been cited as significantly contributing to the city's inability to cope with and respond to its disproportionately high numbers of COVID-19 cases (Lev, 2020; The Toronto Sun, 2020). Already struggling provincially, Ontario is reported to have the fewest hospital beds and "lowest hospital hours per patient of any province in Canada" (Brophy et al., 2021). However, the funding shortfalls and resulting implications become far more significant when focusing

Figure 1. COVID-19 Cases by City in Peel Region as of January 27, 2021

on Brampton specifically and its high priority neighbourhoods. According to Brampton's Mayor, Patrick Brown, Brampton receives "nearly a thousand dollars less in health care funding per capita than elsewhere in Ontario" (Nasser, 2020). This funding discrepancy is alarming, especially when comparing Brampton's COVID-19 cases, healthcare funding and supports to its regional neighbours, the cities of Caledon and Mississauga. Peel Region's most recent data clearly shows Brampton as accounting for over 60 percent of the regions COVID cases, which is nearly double the cases of the more populous Mississauga, and more than 16 times the cases of the less-urban Caledon (Nasser, 2020; Peel Region, 2021). Yet, despite a need for greater resources, Brampton suffers with significantly less. While Ontario hospitals receive funding to provide on average 2.19 hospital beds per 1000 persons, the local funding received in Brampton does not even allow for one bed for every 1000 of its residents (The Toronto Sun, 2020).

Additionally, although more centres have very recently been created, early on in the crisis, when testing could have played a critical part in slowing the spread, Brampton had only one testing centre, while Mississauga had 3 (Nasser, 2020). Compared to other cities in Ontario, Brampton is short nearly 1 billion dollars in healthcare funding every year (Weikle, 2020). This shortfall puts Brampton at a clear disadvantage; less funding results in fewer hospital beds, less testing and prevention tools, and inadequate supports and services (Weikle, 2020). Brampton has been left critically unprepared to successfully respond to an ongoing health care crisis of this magnitude. Being chronically underfunded and underserved has left Brampton ill-equipped to keep its residents healthy in the battle against COVID-19.
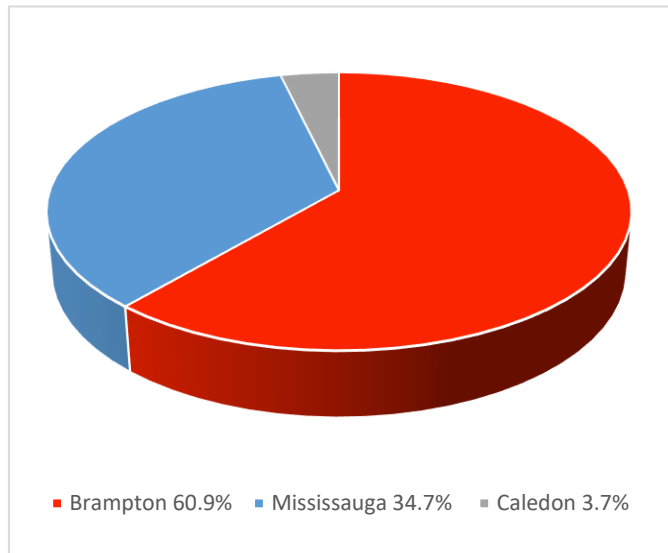
2.3.2 Socio-Economic Status

The literature also points to socio-economic status as a significant contributor to the high rates of COVID-19 in the L6X and L6V neighbourhoods in Brampton. It is well documented that those with lower socio-economic status are at a higher rate of contracting diseases (Rangel et al., 2020), and the same is true for COVID-19. With the restrictions for COVID-19 in place, employees considered to have essential jobs are required to attend work even though they are at higher risk of contracting COVID-19. These essential jobs include grocery store clerks, long term care employees, and warehouse or factory employees who often receive low pay for their work (Mykhalovskiy & French, 2020). Because these essential jobs typically have lower pay rates, these individuals are in a lower socio-economic bracket and find themselves filling high-risk and precarious positions where they cannot afford to jeopardize their employment status. These working environments are such that employees work amidst unsafe conditions and are ill-equipped to prevent COVID-19 transmission, such as in warehouses where it is difficult to socially distance (Thompson, 2020). In many of these precarious working environments, employees are also afraid of notifying their employer of COVID-19 testing or results for fear of losing their job (Thompson, 2020). Pertaining to socio-economic status inequalities, reports also indicate that many Brampton residents live in overpopulated homes (Mykhalovskiy & French, 2020). The risks involved in these precarious situations are twofold. It is more difficult for individuals in overcrowded homes to self-isolate, and the resident(s) who are employed are more likely to attend work to financially provide for themselves and their families.

2.3.3 High-Risk Employment

The literature reveals that industry workers are at a greater risk for contracting and transmitting COVID-19 and that the higher positivity rates in Brampton are due to the volume of people that do not have the option to work remotely (Nasser, 2020). According to Brampton Mayor Patrick Brown, "Brampton is home to a disproportionately high number of essential workers in industrial settings who face a heightened risk of infection" (Artuso, 2020). Many people who work in high-risk industries, such as food processing, light manufacturing, transportation, trucking, and health care, have little control of or ability to socially distance (Thompson, 2020; Weikle, 2020). Distribution centres such as Amazon and FedEx, where assembly lines make it difficult to physically distance, increases the likelihood of COVID-19 exposure compared to working at home (Weikle, 2020). Frontline and essential workers have been disproportionately affected as they not only face high exposure to COVID-19 but sometimes also lack the necessary resources and adequate protections, including PPE and engineering and administrative controls, to keep themselves and their families safe (Brophy et al., 2021). Therefore, it is not surprising that COVID-19 is so prevalent in the Brampton community, where more factory workers, industrial workers, and essential workers reside (Artuso, 2020). Job Precarity has also been cited as a significant contributing factor to the rise of COVID-19 cases in the area. Temporary workers, new hires, and new immigrant workers who display COVID-19 symptoms are less inclined to stay home from work, get tested, or report to health authorities where they work when they do get tested (Weikle, 2020). Many residents believe that if they test positive for COVID-19, their employer will dismiss them or not

hire them back after quarantine (Weikle, 2020). This is doubly concerning for temporary foreign workers whose migration status relies on their continued employment with a fixed company. Their risk of losing income is coupled with losing their work permit in Canada and being sent home (Thompson, 2020).

2.3.4 Intergenerational Households

Intergenerational households have been linked to a higher contraction rate of COVID-19 (Lev, 2020). Brampton has nearly 50 percent of households with four or more people living under one roof (The Toronto Sun, 2020). Parents and grandparents are, in part, being taken care of and supported within these households, often due to a lack of culturally competent or linguistically appropriate seniors housing or long-term care options available (Weikle, 2020). However, the lack of long-term care options is only one in a myriad of reasons cited for South Asians choosing multigenerational living. One report noted a "cradle-to-grave family system that protects and condones codependency" and explained, from a South Asian's seniors' perspective, "we look after you when you're small, you look after us when we are old" (Luk, 2020). While social, cultural, and economic supports were repeatedly cited as advantages for intergenerational living, also evident was that intergenerational and overpopulated homes make it very difficult to self-isolate when a positive COVID-19 test is received, which significantly increases the risk of transmission (Mykhalovskiy & French, 2020). In British Columbia, another province hit hard with a disproportionate rise of COVID-19 in its South Asian community, Provincial Health Officer Dr. Bonnie Henry said, "reasons for high numbers of COVID-19 cases [in that area] include workers in riskier jobs like food processing and health care returning to multigenerational homes where the virus can spread quickly (Luk, 2020).

While multiple reports are blaming multigenerational households for spreading the virus, there have been many equally warning against placing blame here, suggesting that "the fact that many racialized communities live in multigenerational households pathologizes culture and does not address the root causes of why these communities might be disproportionally affected by the pandemic (Luk, 2020). Placing a stigma on racialized communities and emphasizing a particular racial group's lifestyle, cultural customs, and norms as a barrier to fighting COVID-19 can result in cultural stereotypes, racism and the creation of further barriers to accessing testing and treatment (Nasser, 2020). It is recommended that "instead of pointing out how such living arrangements could make COVID transmissions easier ... health officials [should] focus the message more on how to protect seniors within such households and how to mitigate risks of exposure" (Luk, 2020).

2.3.5 Patterns of Mobility

The study found that migration, and patterns of travel to and from Brampton, have a role to play in the transmission of COVID-19. Before the border closures in March 2020, Brampton and the surrounding Greater Toronto Area (GTA) saw a larger initial seeding of the virus due to [its] close connections with New York, the U.S. epicentre of transmission" (The Toronto Sun, 2020). Brampton's Mayor, Patrick Brown, discussed how patterns of mobility affect his community's

exposure to COVID-19, citing "Brampton's significant trucking sector, and the fact that one of its largest employers is Pearson International Airport, which thousands move through every day; [and] international travellers to India and Pakistan, which are combating their own COVID-19 outbreaks" as significant risk factors (Nasser, 2020). However, while close geographical connections and travel patterns can be cited as risk factors for transmission, Dr. Ripudaman Minhas, a developmental physician at St. Michael's Hospital in Toronto, voiced concern that "over-emphasizing travel to specific countries ... glosses over the more important socio-economic factors that can increase the risk of infection" (Nasser, 2020). Minhas also points out that "when we highlight particular racial groups, their travel patterns, and their day-to-day lifestyles as being problematic, we risk inciting conflict and racism ... the focus really needs to be on solutions that work for higher-risk communities, taking into account their health behaviours and their lived reality" (Nasser, 2020). The research suggests a need to counteract popular opinion pertaining to patterns of travel, which is contrary to the dominant discourse supported by Ontario's premier Doug Ford. In a September 2020 news conference about events within Brampton's South Asian communities, Ford said, "I understand that a lot of cultures have massive weddings, bringing people from all over the world. You just can't do it" (Nasser, 2020). In response to Ford's comment, Gurpreet Malhorta, Chief Executive Officer at Indus Community, a not-for-profit organization serving the Brampton community for over 35 years, said the South Asian communities are being unfairly targeted, citing large numbers of gatherings in major cities all across Ontario, Malhorta asserted: "I don't think it can be something lain at the feet at Brampton, specifically, or the South Asian community" (Nasser, 2020).

2.3.6 Cultural Factors and Approaches

Repeated reports of how COVID-19 disproportionately affects racialized populations were found across the literature. Toronto Public Health reported that in the summer of 2020, "83 percent of COVID-19 cases occurred in racialized people" (Weikle, 2020). Public Health Ontario (2020) also noted that "the most ethno-culturally diverse neighbourhoods in Ontario, primarily those concentrated in large urban areas, are experiencing disproportionately higher rates of COVID-19 and related deaths compared to neighbourhoods that are the less diverse" adding that, "the rate of COVID- 19 infections in the most diverse neighbourhoods was three times higher than the rate in the least diverse neighbourhoods." It has also been found that in communities with higher-visible minority populations, there were "lower odds of testing, whereas areas with higher household income and greater percentages of uncoupled individuals had higher odds of testing (Sundaram et al. 2020). While "historical work on epidemics has also shown that the harmful effects of pandemics are disproportionately felt by racialized immigrants and people living in circumstances of economic and social marginality" (Mykhalovskiy & French, 2020), this study has also made clear that cultural and racialized experiences can be cited for a number of underlying risk factors pertaining to the transmission and prevalence of COVID-19. While resolving many of the structural racial inequalities evidenced in this study's previous findings, such as the necessity of working in high-risk industries and living in overpopulated households, cannot be done overnight, other culturally responsive approaches can be more swiftly addressed and implemented. There are gaps to be filled to support efforts to reduce the prevalence of COVID-19

in Brampton's high-priority neighbourhoods. One such gap is the need for adequate provisions of "culturally appropriate face masks that fit over a turban or a hijab," as well as the need for "community health ambassadors," people who interact with locals — in their own language — in parks, temples, mosques and at grocery stores, to distribute information and resource materials on preventing the spread of COVID-19 (Weikle, 2020). While Brampton's racialized populations cope with the prevalence of COVID-19 within their communities, culturally responsive efforts are urgently needed to support them. One such effort reported was that of the SEVA. Food Bank's Langar on Wheels program, "a community kitchen that provides culturally appropriate meals for 45 seniors" in Brampton and "fills the gap that traditional Meals on Wheels programs are unable to support (Weikle, 2020).

In times of crisis such as this, Brampton's cultural communities require additional support, not condemnation. When asked to respond to accusations that Brampton's South Asian community is to blame for its high rate of COVID-19 infections because of things like Diwali celebrations, the head of a local non-profit replied, "It's socio-economic issues, not flouting of social distancing rules, that has made the area a COVID- 19 hotspot ... it's because of the fruit and vegetables that you insist on having on your shelves, the toilet paper and paper towel that you insist on having there. As you go through that store, who do you think stocked it? Who's at the cashier's desk? Who trucked it in?" (Weikle, 2020). Director of the South Asian Studies Institute at British Columbia's University of Fraser Valley echoed these sentiments, suggesting that "generalizations about gatherings [and] multigenerational homes pathologizes culture" (Luk, 2020).

2.3.7 Communication Strategies

There is a strong need for "public health officials to provide rapid, clear messages delivered effectively for the entire affected population to promote an accurate understanding of the situation" (Brooks et al., 2020). Ensuring frequent and ongoing communication of consistent information regarding the COVID-19 safety precautions by the government and local organizations to Brampton locals is needed to reduce the spread of COVID -19 in the area. Although language barriers were cited as a contributing risk factor to successfully disseminating critical communication throughout the pandemic, Lawrence Loh, the medical officer of health for Peel, stated, "the region has been working closely with community organizations and takes care to ensure communications around COVID-19 are available in the area's preferred languages" (Weikle, 2020).

The success of similar endeavours was reported in British Columbia, where COVID-19 numbers within the South Asian community significantly dropped after community organizers committed to ensuring "culturally appropriate messaging and culturally appropriate advice" were available to the South Asian community (Bathe, 2021). After B.C.'s spike in COVID-19 cases in the fall of 2020, The South Asian COVID Task Force (a grassroots organization initially formed in Ontario) got creative and played a significant role in changing the trajectory, "they acted in skits for social media platforms, used TV and radio ads to run through ethnic media, made Tik-Tok videos and created graphics to forward through WhatsApp" (Bathe, 2021). The content the task force created was

made available in Punjabi, Hindi, Tamil, Gujarati and Bengali and included infographics for which the feedback was incredibly positive. When describing the feedback, Dr. Madhu Jawanda, a volunteer with the South Asian Task Force, discussed that the response received indicated that the South Asian community "sees themselves in the infographic … they feel heard and they feel like they understand the public health messaging" (Bathe, 2021).
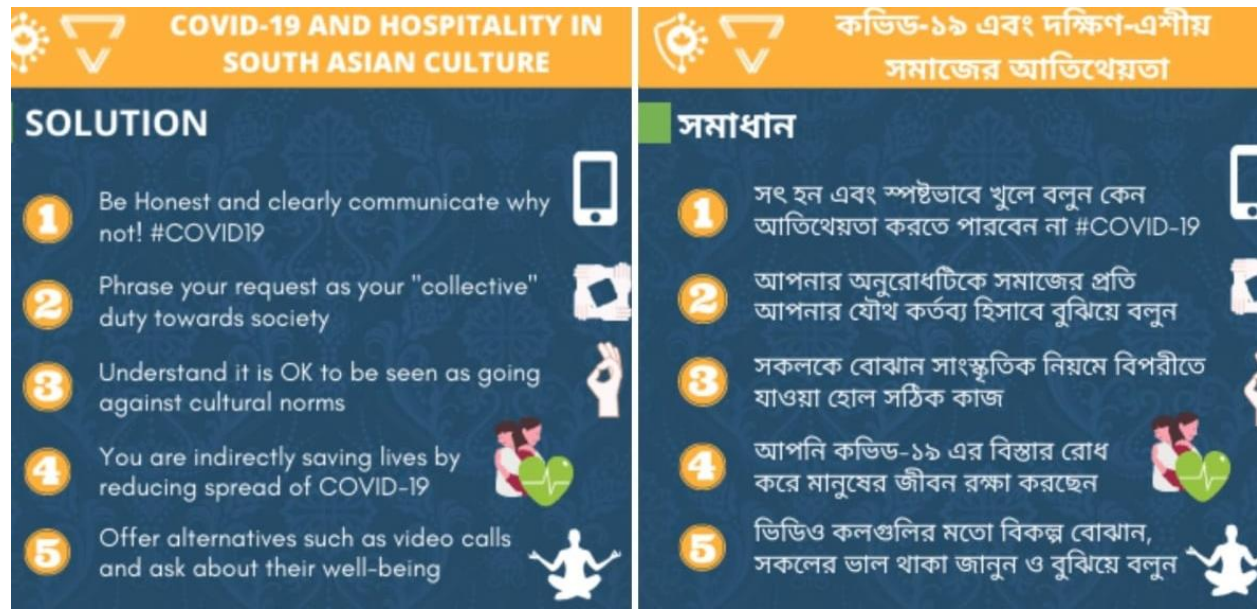
Figure 2. Infographic Addressing Hospitality: Tailored messaging

Another organization, the COVID-19 Sikh Gurdwara Initiative, is also finding similar success in its communication strategies with B.C.'s elderly within the Punjabi community; through teaching about masks, hand hygiene, and the need for physical distancing, a volunteer with the initiative reported that they "realized that sometimes, it's not even about the translations but rather about the fact that [they] care" (Bathe, 2021).

General education regarding COVID-19 and safety precautions (i.e., social distancing, masks, quarantining and self-isolation) may support efforts to reduce stigmatization around COVID-19 (Brooks et al., 2020). Reducing stigmatization could also result in more testing among Brampton community members. As public awareness increases, the implication is that the public will also increase the "level of personal protection" (Xue et al., 2020). If this is not the case, there may be other factors at play. However, it has also been suggested that "appeals to altruism" such as "reminding the public about the benefits of quarantine to wider society" should also be considered and utilized, as it has been found that individuals follow mandated guidelines more strictly when viewing their actions and restricted behaviours as being for the greater good (Brooks, K. et al., 2020).

2.3.8 Mental Health

A frequent finding amongst the literature is COVID-19's effects on mental health. Social isolation and quarantining have a significant impact on mental health amongst most Canadians. However, it was found that specific groups are more likely to experience mental health stressors during the pandemic, such as low-income earners, the unemployed, precariously employed and essential workers, women, lone-parents, and visible minorities (especially amongst South Asians and Filipinos).

Low income and unemployment are consistently reported as indicators with a high potential for adverse mental health experiences. Individuals who are unemployed during the pandemic, whether as a result of the pandemic or not, are more likely to experience dire financial consequences, such as the inability to pay for rent, groceries, or utilities, resulting in greater mental health impacts such as depression and anxiety (Robillard et al., 2020; Statistics Canada, 2020). Financial stressors were also cited amongst essential workers who, while also occupying low-paying jobs, face additional issues that affect mental health, such as higher interactions with the general public, and greater exposure to COVID-19 (Robillard et al., 2020). It is also reported that essential workers who interact heavily with the public face higher demands due to the nature of their employment, such as healthcare workers, who are at higher risk of experiencing mental and psychological burnout (Harrison, 2020). When considering multiple intersecting identities such as race, sex, socio-economic status and nature of employment, the mental health impacts of COVID-19 can be exponentially dire (CAMH, 2020).

Visible minorities are facing more mental health barriers compared to non-racialized populations. Within the visible minority group, South Asians are cited to be experiencing more prevalent mental health concerns through self-rating. According to crowd sourced data collected in the study *Mental Health of Population Groups Designated as Visible Minorities in Canada During The COVID-19 Pandemic* presented by Statistics Canada (2020), South Asians "were more likely than participants belonging to other visible minority groups to report fair or poor self-rated mental health and somewhat or much worse mental health since physical distancing began." With the exception of Filipino participants, South Asians were also more likely to "report symptoms consistent with a moderate or severe generalized anxiety disorder" (Statistics Canada, 2020). In part, these findings can be attributed to the sizable South Asian population working in warehouses and other essential jobs with lower-paying wages (Statistics Canada, 2020).

A common theme in the literature discusses the pre-existing stressors that affected people's mental health pre-pandemic - stressors now heightened while living through a pandemic. Regarding gender, stress factors that existed for women prior to the pandemic are being exacerbated, increasing levels of stress already experienced (Robillard et al., 2020). Lone parents are also more likely to experience higher levels of stress, with social support networks impacted due to social distance and stay-at-home measures, specifically families who rely on in-person visitation programs that have been suspended due to government regulations (Suleman et al., 2020). Mental health services specific to sex, race, and culture are highly recommended to

respond to the range of mental health experiences within the Brampton community (Thompson, 2020; Robillard et a, 2020).

While tailored services and COVID-19 policymaking are responsively developed to better support mental health within high priority neighbourhoods, the literature discusses self-care strategies and wellness tools for individuals to employ during this crisis. At-risk populations should consider minimizing the use of alcohol and drugs, getting adequate rest without interruptions, exercising, and being creative (such as doing art or coming up with activities to interact with others virtually) to decrease the intensity of anxious and depressive feelings (Robillard et al., 2020).

2.3.9 Government Guidelines and Restrictions

Government restrictions are an essential factor in stopping the spread of COVID-19 and have included wearing masks, two-metre social distancing, and when tested positively for COVID-19, self-isolating and quarantining. There have been school, university, and public playground closures throughout the year to reduce contact spreading (Allen & Bogoch, 2020). Only essential businesses have been allowed to remain open for the duration of the pandemic. These regulations are intended to reduce the number of individuals infected with COVID-19 (Xue et al., 2020).

While provincial restrictions have been noted as extremely beneficial in decreasing COVID-19 numbers (Bathe, 2021), it has also been reported that the inclusion of "more South Asian physicians or health care workers in the [provincial] efforts to spread the message about COVID-19 restrictions" are needed (Luk, 2020).

In other discussion surrounding government restrictions, a common thread amongst several sources suggests the importance of recognizing the unintended effects of these restrictions, highlighting that they have "potentially deepen[ed] health inequities amongst segments of the population that are already vulnerable, such as Indigenous, racially marginalized, and/or economically disadvantaged populations" (Rangel et al., 2020). These findings should not be overlooked.

2.4 Reflections

This study not only summarizes what is currently known of the risk and protective factors relating to COVID-19 in Ontario, but it also highlights the systemic factors that increase positivity rates of COVID-19, specifically in the L6V and L6X high priority neighbourhoods in Brampton. Areas for further study were found and discussed, such as "a better understanding of the different health and economic determinants that may put people in some ethnic communities at higher risk of COVID-19" and the need for collecting ethnicity-based data that will better "allow health officials to help communities impacted" (Luk, 2020). Overall, a greater need for more rigorous community-driven, multi-pronged approaches to adjust responses to and reduce the prevalence of COVID-19 in Brampton is needed. Approaches could include "better worker protections, more workplace inspections, paid sick days and eviction protection" to alter the deeply rooted fear connected to

losing employment or shelter and eliminate the intense pressure to attend work when feeling sick or after testing positive for COVID-19 (Weikle, 2020). Immediate and ongoing interventions are required both within the L6X and L6V communities and outside these areas, in other similarly impacted and diverse neighbourhoods. Public Health Ontario (2020) reported that "people living in the most diverse neighbourhoods were more likely to experience severe outcomes (hospitalizations, ICU admissions and deaths) than people living in the least diverse neighbourhoods." The overall findings of this review reveal that although the provincial policies for protection against COVID-19 are currently working in certain communities, areas with higher numbers of "racialized immigrants and people living under circumstances of economic and social marginalization" require increased culturally responsive and socially sensitive approaches and interventions (Mykhalovskiy & French, 2020). A more nuanced understanding of how COVID-19 impacts cultural groups like Brampton's South Asian community is needed. The disproportionate prevalence of COVID-19 in the Brampton community must be further studied so that culturally specific and socially relevant strategies can continue to be developed. It is hoped that the information contained in this report will support the ongoing community efforts to raise awareness of COVID-19 in Brampton while reducing the transmission amongst and stigma facing its most vulnerable and marginalized residents.

3. Methodology

The information contained in this assessment is based on consultations with residents, services providers, practitioners, physicians, health care service providers, students, community partners, PCHS' executive management staff, and official and reliable documents from a variety of sources. The primary data was collected through online surveys of 111 respondents, 16 key informant interviews and 4 focus groups. It should be noted that missing values[2] were excluded from the data analysis as every respondent did not answer all survey questions. Percentages are presented with one decimal place, so there will be a slight rounding error. While focus groups and interviews were conducted by persons of South Asian origin, all data collection instruments were developed in English and Punjabi. The information provided in this study reflects the broader population with COVID-19 in the Brampton community and highlights COVID-19-related challenges and experiences among South Asians, and more particularly those of immigrants.

Table 1. Data Collection Methods

Data Collection/Research Method	Main Sources of Data	# of Participants
PRIMARY RESEARCH *(Mainly for perception data)*		
Key Informant Interviews: 16 interviews with Service Providers in the Brampton community	Service Providers and residents	16
Online Survey: One self-administered questionnaire for residents in the Brampton community	Service Providers and Residents	111
4 Focus Groups: South Asian Clients/residents	Clients/residents	12
SECONDARY RESEARCH *(Mainly for factual data and some professional practice data)*		
Review of the literature on COVID-19 related services in the Brampton community (COVID-19 characteristics, services, issues, trends, etc.) Collection of official COVID-19-related statistics/factual data on the residents of the Brampton community	Information collected from the Census and previous research studies on the COVID-19 statistics in the Brampton community	Not Applicable

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[2] *A missing value refers to no response on a particular item or question. For example, if in a sample of 50 participants, 35 responses were given to a particular question, the analysis of the responses to that question would be based on the number 35 and not on 50. Percentages and other statistics would be based on 35.*

3.1 Data Analysis

Qualitative data analysis:

- Review of the literature on COVID-19 by using data in the form of reports, research studies, and resource tools

- Using the qualitative data from online surveys, focus groups and key informant interviews.

- Using the Photovoice research method: For this method, community participants were asked to engage in a photovoice activity to document, through photos and text, their experiences, needs, perceptions or thoughts of being in the Brampton community during the COVID 19 pandemic. It was a qualitative method to document and reflect reality.

- Review and analyze the program-related documents

Quantitative data analysis:

- Most quantitative findings were taken from the key informant interviews, focus groups, on-line surveys and secondary sources.

- Assess the level of socio-economic status in selected high priority communities in Peel Region by using the taxonomic method.

- A correlation analysis technique was used to examine the effects of COVID-19 on socio-economic and cultural factors.

3.2 Ethical considerations, Hypotheses/Assumptions:

- In compliance with the AODA policy, accommodations were made to support the full participation of all interviewees, survey respondents, and other stakeholders in the data collection process.

- It is important to note that addressing COVID-19 effectively requires artificial intelligence technology, reliable data, financing, and government support.

- All participants' responses were treated as confidential.

- We were sensitive to the Ontario government and local public health guidelines and the cultural norms and practices in the neighbourhoods where the research was carried out.

3.3 Limitations

Due to COVID-19 restrictions and time constraints, the researchers decided not to pursue recruitment through door-to-door data collection. The sample of participants was not randomly or systematically selected. Instead, the researchers used a purposive sample – administering the survey to residents through connections to agencies serving L6V and L6X areas. Even in this regard, challenges were experienced in attempting to obtain feedback from clients as some organizations have specific protocols for such matters.

The research carried out for this assessment was exploratory in nature. When asked to specify where they resided, 28% of the participants indicated that they lived in different area codes. 72% of the survey participants reported that they lived in the Brampton community. A large proportion of the survey respondents were South Asians residing in the Brampton community (L6V and L6X).

It is crucial to note that the population and socio-economic data used in the finding section of the report is from 2016 by Forward Sortation Area (FSA). Many demographic changes may have occurred since that time.
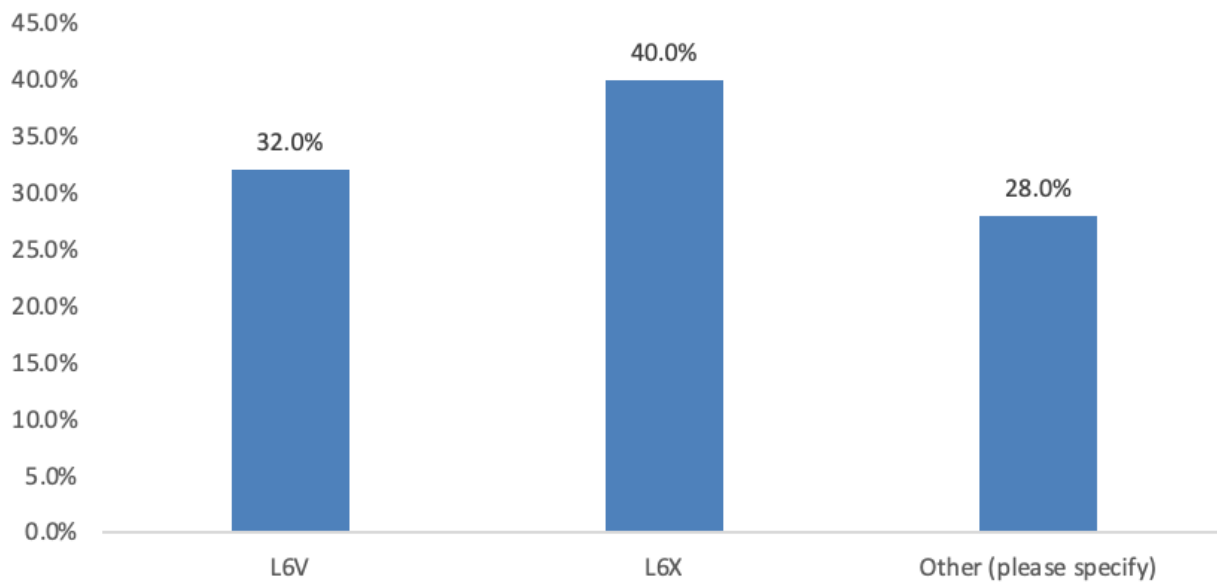
Figure 3. Residential Address of Survey Respondents
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

4. Findings and Discussion: Primary Sources

4.1 Respondents' Characteristics

Information on the characteristics of the online survey participants is provided in the following section. The reader should note that missing values were excluded from the data analysis.[3]

Table 2. Profile of Survey Respondents

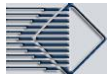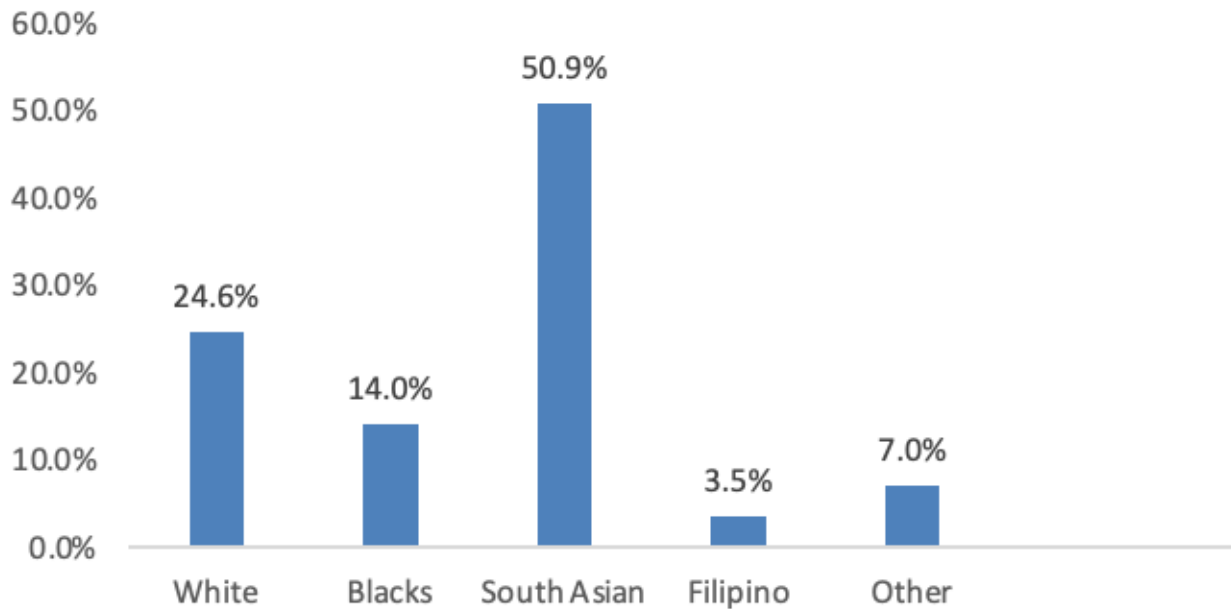|	
Gender	69% of respondents were female, and 31% were male.
Age	The age distribution indicated most respondents were aged 35-44 (31.0%) and 45-54 (22.4%). The categories 25-34 (10.3%), 55-64 (15.5%), and 65+ (10.3%) were less represented. Lower response percentages for under 18 (3.5%) and 18-24 (6.9%) could indicate that factors pertaining to these groups may not have been as well captured in this analysis.
Sexual Orientation	In terms of sexual orientation, most respondents are heterosexual (70%), and 13% belong to the LGBTQ+ population.
Persons with Disabilities	There is a small portion (less than 10%) who have disabilities.
Racial/ Ethnic Background	The majority of participants belong to the South Asian population (e.g., East Indian, Pakistani, Sri Lankan, etc.). Some participants reported that they were from the Black, White and Filipino populations.
Religious Background	There is a large Christian proportion of respondents. Other common religions in the community include Hindu and Sikh groups.
Children in Daycare/ School	The majority of participants (65.5%) do not have children in daycare, which means that they are able to keep their children home and prevent additional contact and spread. Parents who have children in daycare are at increased risk of contracting COVID-19 as daycares are often a prime location for transmission (children do not understand social distancing or safe infection-prevention protocols).
Essential Job/Service	60.3% of participants work in essential jobs and services. These individuals (doctors, nurses, delivery drivers, grocery store workers, etc.) work in locations with continuous exposure to others, increasing the risk of contracting and transmitting COVID-19.
Work from Home	Most individuals (62.1%) have successfully transitioned to working from home. This prevents COVID transmission due to decreased contact, but it can also have significant mental health impacts (staying indoors all the time). 37.9% of participants must work on-site, which significantly increases COVID transmission due to increased contact with others.

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[3] *A missing value refers to missing information on a particular item or question. For example, if in a sample of 27 participants, only 25 responses were given to a particular question, the analysis of the responses to that question would be based on the number 25 and not on 27. Percentages and other statistics would be based on the 25.*

Paid Time Off	42.1% of participants do not have paid sick leave. This is especially concerning during a pandemic. When individuals are forced to go to work, despite being sick, they pass the infection onto colleagues, increasing the spread of COVID-19.
Occupation	Participants' professions include nurse, cook/chef, food supply worker, student, mental health counsellor, teacher, Uber driver, Social Service Worker, etc.
Employed	67.2% of residents are employed, and 32.8% are not. The unemployment numbers are high and may be due to COVID-19-related job loss. Other potential reasons include those who choose not to work or those who are retired. However, the number of unemployed residents is concerning, especially given the number of people who have been laid off during the pandemic. This may mean that income sources are limited during this time. Among those who work, 23.3% work part-time, earning a significantly smaller income. Reasons for part-time work are many, but a notable factor during the pandemic has been businesses reducing employee hours, forcing individuals to work part-time.
Education	The majority of residents have completed post-secondary education. Furthermore, approximately 60% have completed their bachelor's degree and/or gone to complete further education (Master's or PhD). This 60% of the population is well educated, and this increases their socio-economic status. Approximately 22.4% have a college education. Approximately 13.8% have a high school diploma alone, decreasing their chances of having more stable employment.
Access to Technology	The majority of residents have access to a computer, but about 10.3% do not. This may affect their ability to work from home, receive COVID-related news, and socially interact and communicate with others through Zoom/Skype. Not having access to the internet also impairs their ability to seek out timely information about available health resources. The majority of residents know how to use their computers. A little less than 5% of residents do not, possibly due to age or technological difficulties. They may also have difficulty navigating other technologies, such as smartphones The majority of residents have access to the internet through their computer. However, approximately 5.3% do not, which could potentially affect their ability to connect with others (i.e., through video calling) and receive COVID-19 news, updates and provincial regulations. Not having access to the internet also impairs their ability to seek out information about available health resources.
Access to Car	A little less than 20% of residents do not have access to a car. Therefore, they rely solely on public transportation or paid driving services (i.e., Uber) whenever travelling distances. This increases their risk of contracting COVID-19 from an individual during their travels in these public shared spaces.
Perceptions: Government Support	Some participants have said that the government's support has been helpful and that they are satisfied with the level of support provided so far (they believe it's the best that can be done). Others have said that they want more support and more must be done, especially for those most in need.
Needs During This Crisis	Most participants reported needing health, food/meals, income support/financial assistance, and employment. Many are trying to stay positive about the experience but feel run-down and tired. They are trying to remain as healthy as possible and are doing the best that they can.

Racial/ethnic background

Figure 4. Racial/Ethnic Background of Survey Respondents
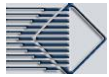
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Are you employed?
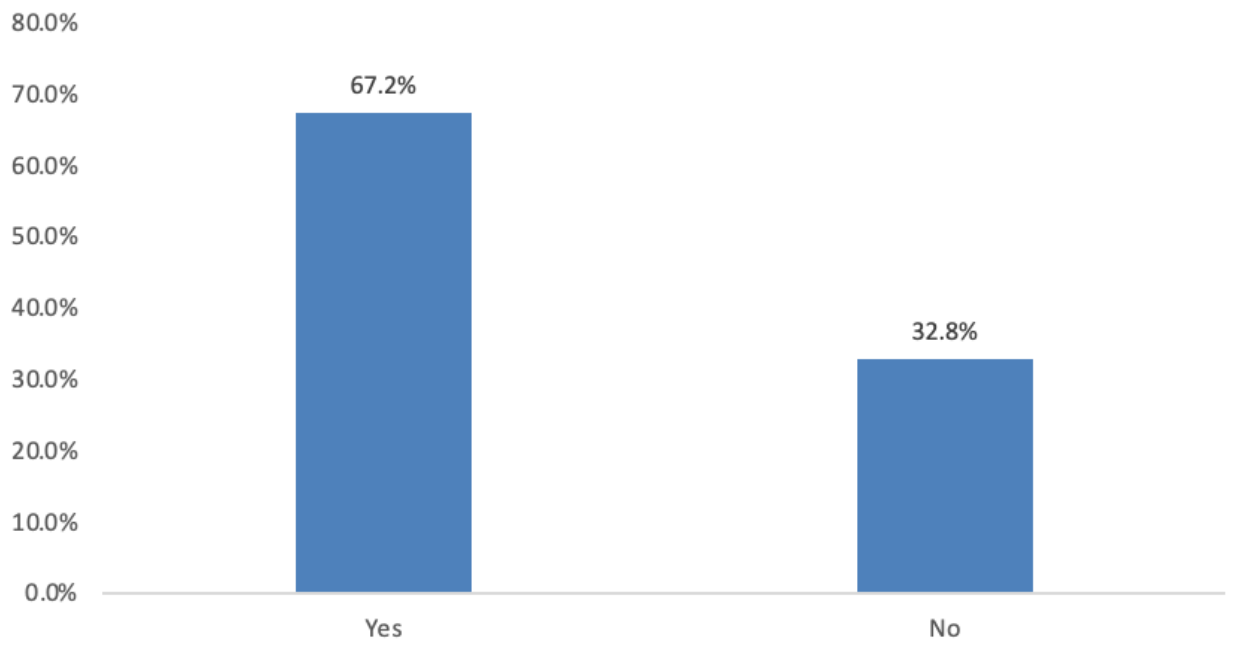
Figure 5. Survey Respondents Actively Employed

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Do you work an essential job/service?
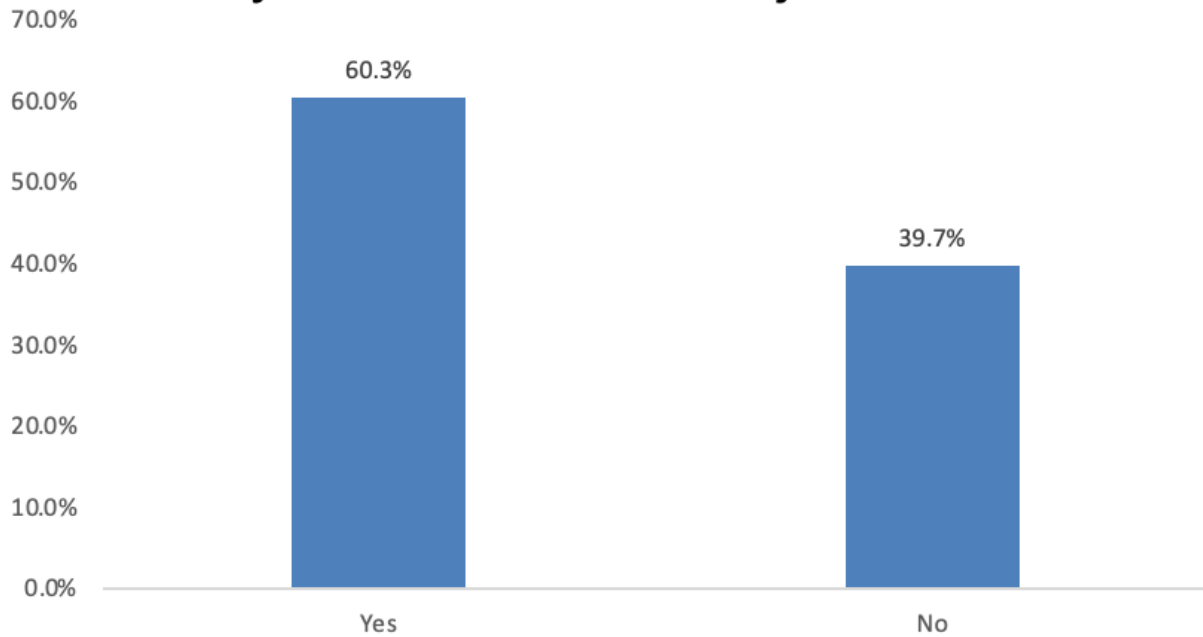
Figure 6. Survey Respondents Working in Essential Jobs and Services
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Does your employer allow you to take paid time off for sick leave?
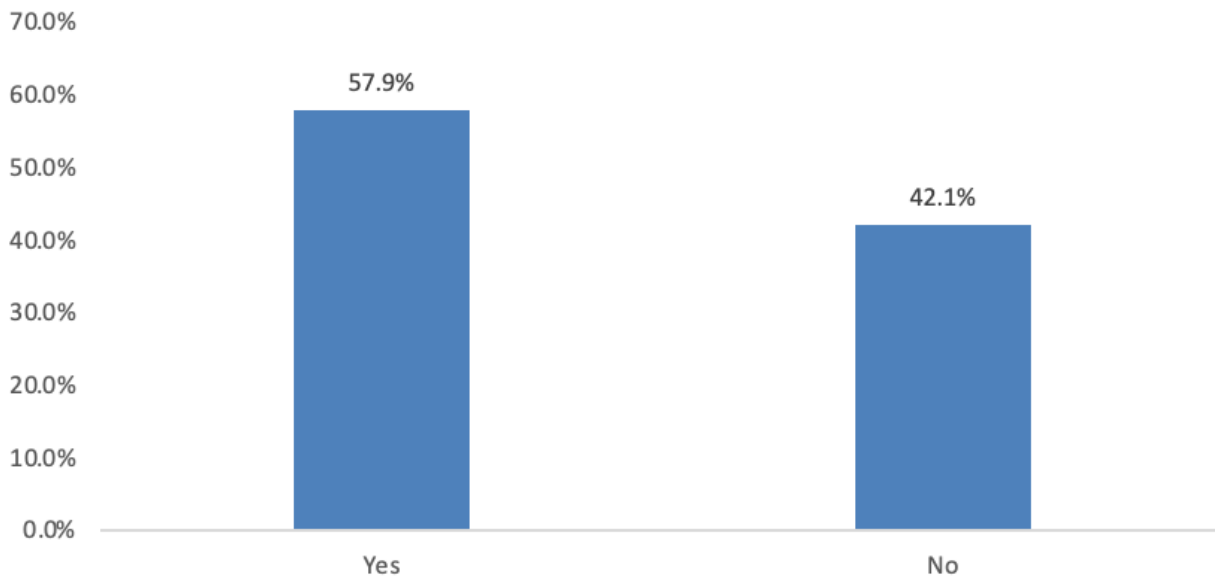
Figure 7. Survey Respondents Access to Paid Sick Leave
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

What do you need in order to improve your own life conditions during this crisis?
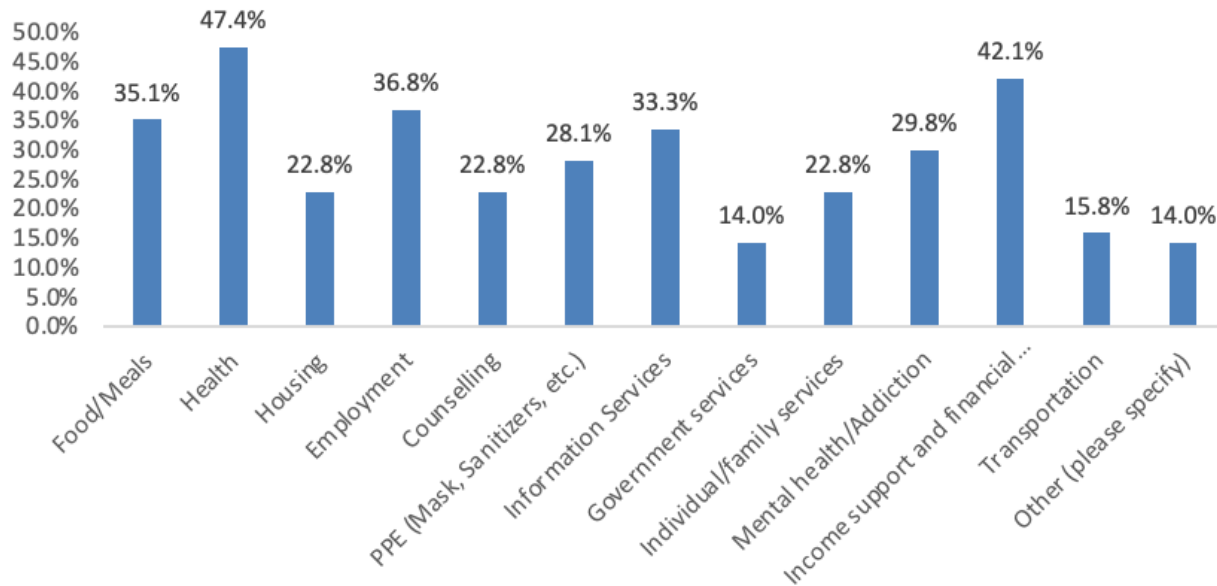
Figure 8. Survey Respondents Feedback on Required Life Improvements

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

4.2 COVID-19 Issues and Challenges in Brampton Community4

Survey respondents and focus group participants indicated that in response to COVID -19, there have been moderate (30.7%) or major effects (22.7%) on people in their neighbourhood. The primary issues and challenges residents face are participants' ability to follow guidelines of COVID-19, participants' experience with social bubbles, participants' challenges regarding COVID-19 testing, participants' awareness of COVID-19 education programs, participants' views on COVID-19 vaccines, and participants concerns regarding social services during the COVID-19 pandemic. Other issues and challenges survey respondents and focus group participants indicated include participants' access to physicians and concerns regarding their physical health, participants' experience with health care services, barriers met when accessing the health care system and mental health services, and other challenges regarding health care services.

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[4] See Appendix 2 Table 3. Summary of COVID-19 Issues and Challenges Faced by Residents

Was COVID-19 affecting people in your neighbourhood?
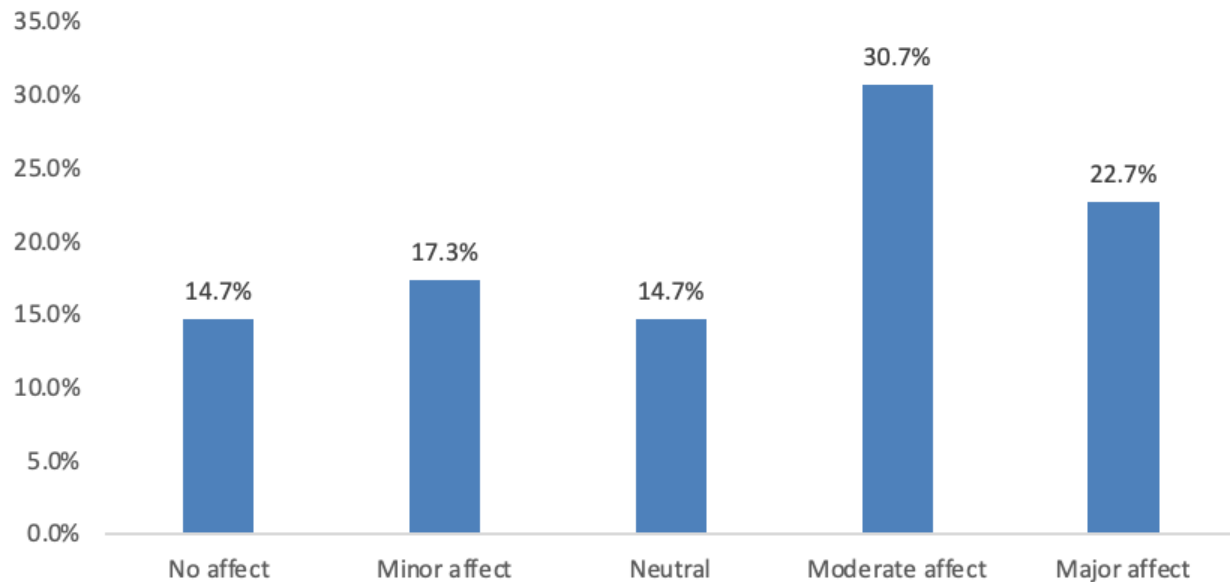
Figure 9. Summary of COVID-19 Neighbourhood Impacts
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

COVID-19 Guidelines

The majority (80%) of participants indicate that their community takes recommendations and guidelines related to COVID-19 moderately to extremely serious, with 90.2% of participants indicating that they follow COVID-19 guidelines, which is necessary for reducing the risk of transmission of COVID-19. On being asked what could be done to address their concerns, nearly one-third of the participants suggest there should be stricter law enforcement to ensure people follow protocols related to COVID-19 prevention, including social distancing measures, use of masks, screening, isolation, and vaccinations.

Additionally, community stakeholders voiced concern through key informant interviews regarding current housing and living conditions amongst the South Asian population, noting a large proportion of the population lives in multigenerational households, which makes their abilities to abide by physical distancing regulations more difficult.

Awareness of COVID-19 Education Programs

A significant concern echoed in both the focus groups and key informant interviews is the need to increase awareness of COVID-19 and COVID-19 prevention strategies in the community. The need for increased awareness is apparent given the participants (29%) who report that they have not had access to COVID-19 education or awareness programs. Little to no access to education and

awareness programs produce the risk of misinformation and additional challenges following COVID-19 guidelines.

Participants in the focus groups and key informant interviews expressed the need for more readily available and understandable information regarding COVID-19 and COVID-19's guidelines to the community. The dissemination of culturally responsive messages in the Brampton communities' native languages was also highlighted. Many of the participants suggested using social media as a platform to propagate information about prevention. Some stakeholders also raised concerns regarding misinformation about COVID-19 in social media as a pressing issue. Proactively using social media platforms to spread factual information and awareness about COVID-19 prevention strategies - as suggested by many of the participants - may be a way to counteract the misinformation on other social media pages.

COVID-19 Testing

Most of the survey participants (83.9%) indicate they know where to receive COVID-19 testing, suggesting that information regarding the locations of test centres in Brampton is being received fairly well by the community. However, there were several possible deterrents regarding testing that were highlighted throughout the survey. These deterrents can lead to less testing and a higher possibility of COVID-19 transmissions. The majority of the participants (71%) indicate that test centres are conveniently located; however, the rest of the participants (29%) report test centres are inconveniently located. However, a large portion of participants agree that they would be more likely to get tested for COVID-19 if testing was available at home (46%) or equally convenient locations like grocery stores (66%). Participants (20%) also mentioned that their employers do not allow time off for employees to get tested, which may deter employees from testing. Another possible deterrent against testing is the uncomfortable process of getting tested, with half of participants (50%) agreeing that testing is uncomfortable. Many participants (45%) expressed they worry that they may receive false results after the testing process, which is another possible deterrent to testing. However, 62% of participants agreed that regular testing might prevent false results; unfortunately, this may not be feasible. Finally, over half of participants (60%) indicated that if there were a cure for COVID-19, they would be more likely to get tested.

The majority of participants (82.3%) indicated that if they were to receive a positive test result, they would be able to self-isolate in their home, whereas 17.7% responded that they would not be able to isolate themselves in their home if they were to test positive for COVID-19. This percentage unable to self-isolate is considerable, especially considering the likelihood of spread within their home and beyond.

Respondents were asked if they feel pressured by others to get tested, even when they are not sick. Almost one-fifth of participants (19.67%) report that they do feel pressured, with 9.84% of participants strongly agreeing with the sentiment of feeling pressure to get COVID-19 tests regardless of whether or not they are showing symptoms. Nearly one-fifth of participants (21.31%) disagree with the sentiment, and 9.84% strongly disagree. The majority of participants (39.34%) remain neutral.

COVID-19 Vaccines

A large number of participants (40%) expressed they would not receive the COVID-19 vaccines or indicated that they would prefer not to answer the question. Only 60% of participants indicated they intend to get the COVID-19 vaccine. Therefore, a significant part of the population may still be left susceptible to COVID-19 after vaccines are delivered.

Regarding perceptions of the COVID-19 vaccine, approximately one-third of the participants (33.9%) agree that the COVID-19 vaccine is safe and effective, while just over half of the participants (51.6%) indicate they are neutral. A small but significant number of participants (14.5%) disagree that the COVID-19 vaccines are safe and effective. A considerable percentage of respondents responding *neutral* or *disagree* with the safety and efficacy of the COVID-19 vaccine may indicate an area of need for vaccine safety and efficacy education. The uncertainty surrounding the vaccine's safety may also explain the number of participants who indicated they will not receive the COVID-19 vaccine.

Social Bubbles

Certain COVID-19 restrictions allow for households to have direct contact with a limited number of other households or people, which is called a social bubble. A relatively equal number of respondents have a social bubble (51.6%) as those who do not have a social bubble (48.4%). As indicated by the participants who do have social bubbles (or people they interact with regularly), the average size of social bubbles is roughly 5 people and 3 households. While social bubbles are important for people's mental health, limiting social bubble interactions is essential when considering that multiple households within an individual's social bubble can more easily spread COVID-19 transmission, especially when accounting for overlap between groups of households.

Outside of participants' social bubbles, most participants (77.5%) indicated that they interact with fewer than 10 people at work. However, almost a quarter of participants (22.5%) interact with over 10 people at work, which is a considerable percentage considering that interaction amongst many individuals in the workplace increases the risk of COVID-19 transmission.

Concerns Regarding Services Offered

Another major concern reported in the survey and focus group discussions was financial stability and job loss due to lockdowns and closures of workplaces, with 50% of survey participants indicating concerns of income support and financial assistance, which can be a significant stress factor. The financial strain and need for increased supports remained a major focus during group discussions, with participants expressing a need for additional help in terms of CERB and government supports. Participants (54%) also indicated concerns regarding financial counselling, which can be used as an opportunity to increase access to these services.

Childcare and caregiving were also voiced as concerns by survey respondents (45%) and participants of key informant interviews. The lack of childcare and caregiving services has put significant stress on participants and poses additional challenges with returning to work. This

concern and need for childcare create additional financial and mental stress in families, especially lone-parent families.

Major concerns were reported regarding services for mental health and addiction (50%). Survey responses and discussions with focus groups and key informant interviews make clear that mental health during this crisis is not adequately being addressed. Family counselling (63%) is also a significant concern among survey respondents and key informants. This issue may be credited to social distancing protocols, with some participants not seeing family enough and others seeing family too much. In one key informant interview, the topic of spending too much time with family due to stay-at-home protocols was highlighted. Family members have been forced to cope with excessive time together, whereas, before the pandemic, most family members' time was spent outside the home at school, work, etc. Being together all the time, without other outlets for social interaction, has created new issues and challenges that families are struggling to deal with.

I.T and technology support (50%) was highlighted as a concern, likely because of increasing virtual requirements for participation at school and work, along with the growing need for technology as entertainment. The necessity of digital and virtual connections during the pandemic, and challenges accessing these necessary connections result in higher stress levels. Other concerns reported by participants were regarding government services (46%,) school service and virtual classes (35%), which could impact mental health; food and supplies (25%) and breakfast programs (37%), which is important to note for accessibility and food insecurity; COVID-19 testing services (33%), which could be regarding inconvenience or accessibility; transportation (31%); and Personal Protective Equipment (PPE) (32%) (this information could be used as an opportunity to improve PPE distribution).

Access to Physicians & Thoughts on Physical Health

While most participants believe their physical health is about the same as pre-COVID-19, it is still important to have a family physician, especially because family physicians provide reliable assessments of COVID-19 risks and information on safe practices. However, 15% of participants indicated they do not have a family physician. The majority of respondents (85%) indicated that they have a family physician, which is relatively high, but the participants who do not have a family physician should not be overlooked.

Experiences with Health Care Services

The majority of people found that their experience with healthcare and hospitals was fair (21%), good (33.9%) or very good (22.6%).

Healthcare System: Barriers

The majority of participants (71.7%) responded that they do not face any barriers when accessing the healthcare system. However, 28.3% of participants indicated that they do face barriers, which is seen as a considerable proportion of respondents facing barriers. In terms of COVID-19 risks,

barriers to the healthcare system could prevent the dissemination of key health information and access to testing.

Mental Health

The uncertainty of the current pandemic has taken a toll on mental health, evidenced by increasing feelings of isolation and depression. While 71.67% of participants responded that they had not encountered mental health service barriers, 28.3% indicated that they had. This proportion of participants who experienced barriers when accessing mental health, especially considering that the majority of participants (95%) indicated they are feeling stress in their lives, with 55% of participants experiencing extreme to moderate stress (which could have significant implications on their mental health). In terms of COVID-19 risks, barriers to mental health support could also multiply challenges associated with social isolation and managing stress. Survey respondents also expressed the need for increased mental health services.

Additionally, the issue of youth, seniors and South Asian women's mental health was discussed by 10 out of 16 stakeholders participating in key informant interviews. In these interviews, it was reported that South Asian women are feeling overburdened and face increased mental health challenges crisis as they attempt to successfully juggle childcare, household responsibilities and unprecedented challenges at work. This point was also reflected in the focus group discussions. Female participants discussed overwhelming stress and mental strain due to a lack of childcare services and the need to guide their children in distance learning while attending to their work obligations both inside and outside the home.

Other Healthcare Services Barriers

Other barriers that respondents (53.3%) indicated with regards to health services are time constraints. Online resources (31.7%), childcare (18.3%) and lack of awareness of resources (28.3%) are also indicated as barriers. Notably, the high proportion of participants who indicated they had a lack of awareness of resources is concerning, as it may limit access to necessary health information and support.
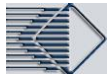
Have you had access to any education programs/ awareness regarding COVID19?
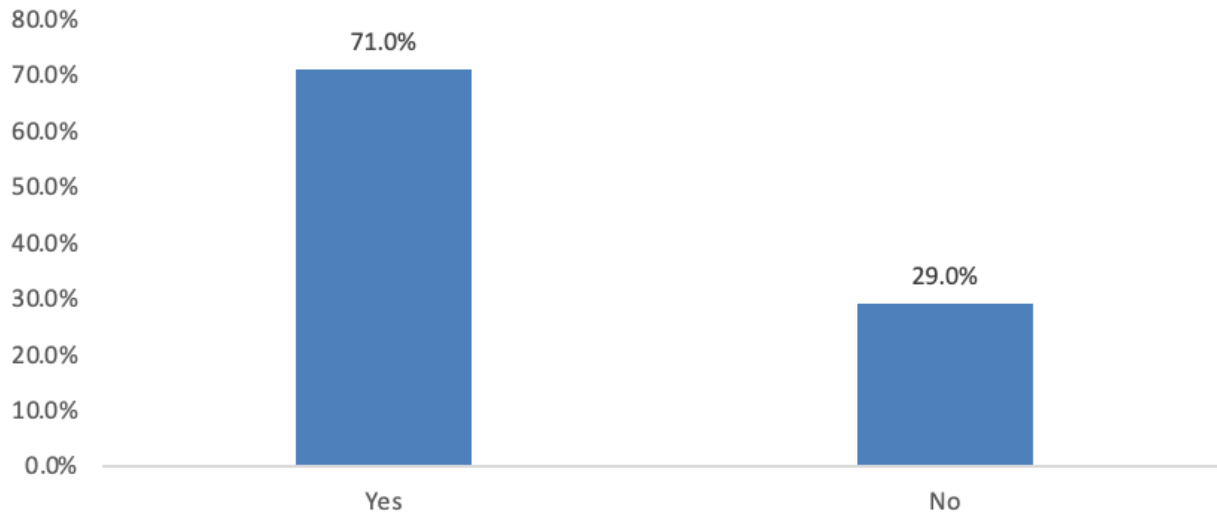
Figure 10. Survey Respondents Access to COVID-19 Education Programs
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Will you get the COVID19 vaccine when it is available to you?

Figure 11. Survey Respondents on Receiving COVID-19 Vaccine
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

When asked why they choose not to get vaccinated, 22% of the respondents indicated concern with the vaccine's possible side effects, and 2% (believing they already possessed immunity) thought the vaccine was unnecessary. Concerns over the supply and avai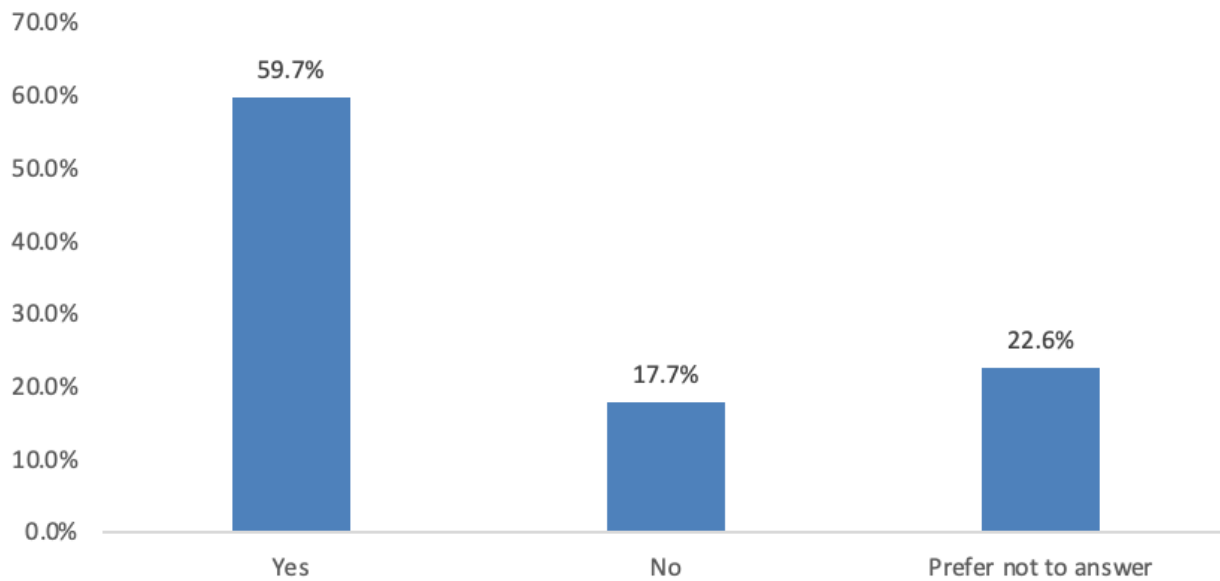lability of vaccines for healthcare workers were also discussed. Vaccine availability concerns were also addressed during the key informant sessions, where almost half of the participants were worried about not receiving a timely vaccination. Survey respondents reported following various safety measures to reduce the risk of contracting COVID-19. Most cited was physical distancing, wearing masks and hand washing. Also, stakeholders mentioned changing daily routines and operations, working remotely, using PPE in the workplace, screening employees and visitors, and the temporary closure of specific programs to comply with government guidelines. The stakeholders added that they have collaborated with other public health organizations, settlement agencies and not for profit organizations for COVID-19-related support.

Almost two-thirds of survey respondents suggested disseminating education on the importance of COVID-19 testing and prevention through mass media and social media. Suggestions were made for specifically targeting communities where COVID-19 was most prevalent so that prevention messages were available where they would be most needed. The respondents identified that important information highlighting procedures and protocols, testing and testing centres should be presented in clear, easily accessible, and culturally appropriate language.
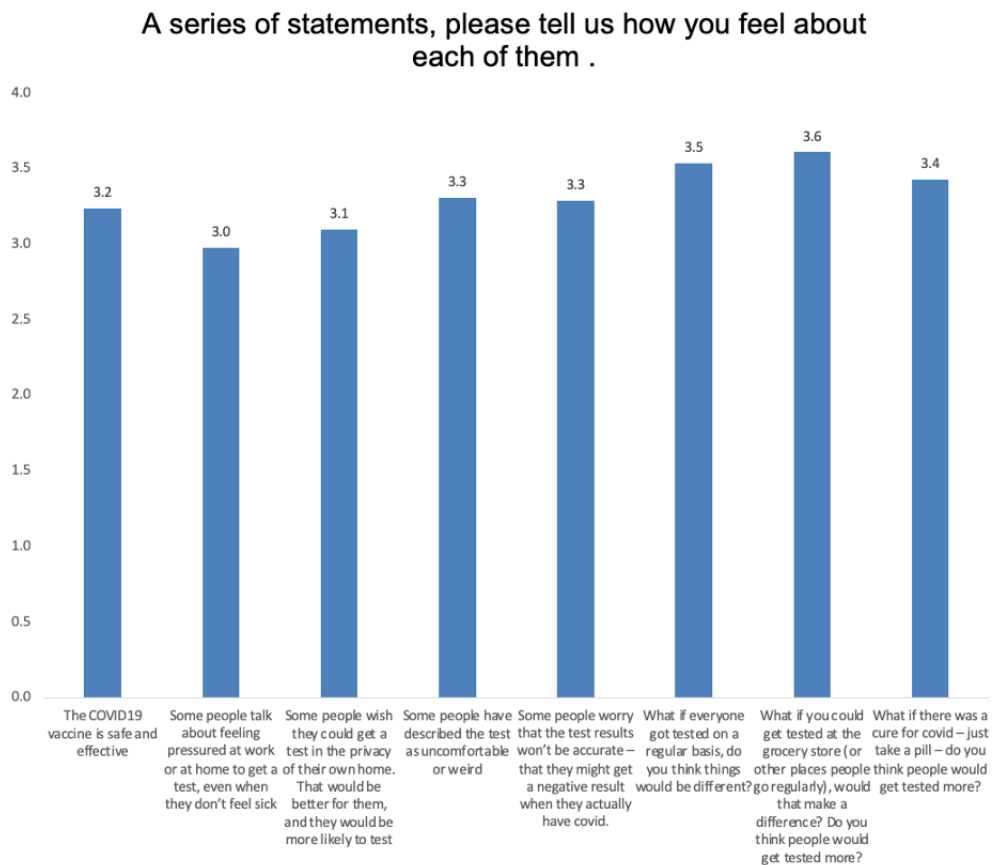
Figure 12. Respondents on Testing and Vaccines: A Series of Statements

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

4.3 Information, Support and Networks during COVID-19

- 87.9% indicated that they do have someone to talk to, while 12.1% indicated that they do not. The proportion who does not have someone to talk to may face an increased risk of social isolation during this pandemic.

- 62.7% reported using online methods, and 74.6% reported using phones. Others (10.2%) included zoom/Facebook (which are online methods) and in-person communication.

- In terms of participants' perception of support during the crisis, most believed their immediate family was supportive (5% believed they were not supportive). 13% said their relatives were not supportive, 15% said their employers were not supportive, 10% said schools were not supportive, 10% said doctors were not supportive, 20% said places of worship were not supportive, 18% said neighbours were not supportive, and 18% said community agencies were not supportive. In summary, participants are receiving adequate support from immediate family members and friends. However, participants believe that additional support needs to be provided by employers (such as reduced pressure to work and improved mental health initiatives), places of worship (such as supports to address mental health issues), neighbours (such as the need to increase neighbourhood bonds through possible online activities), and community agencies (such as the need to improve outreach and accessibility).

How would you describe the following people in your life during this crisis?
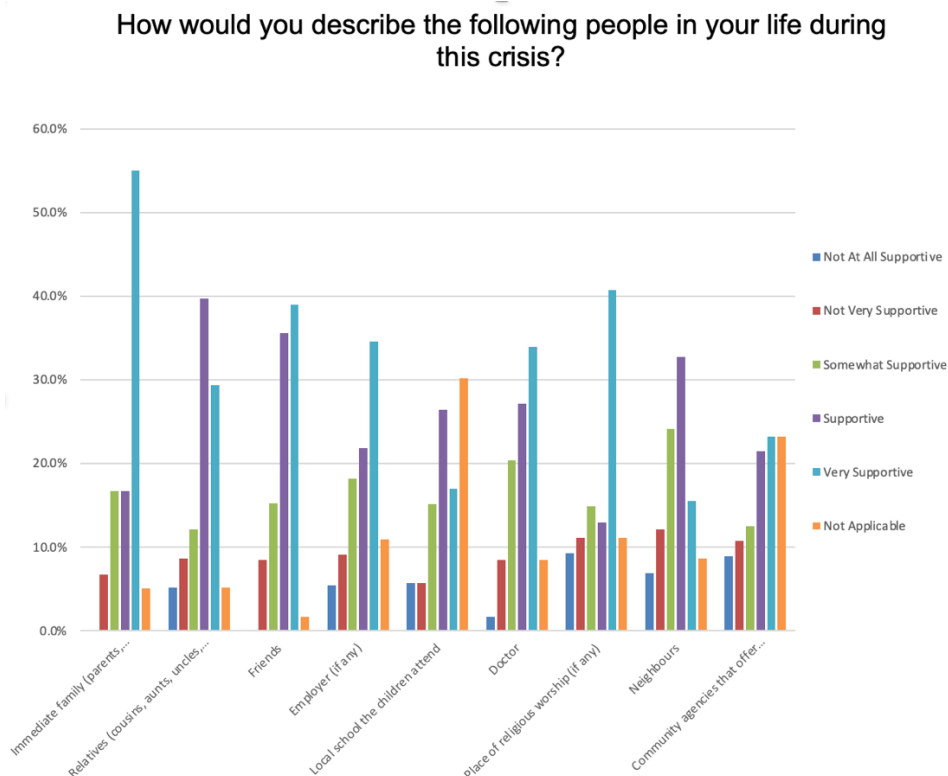
Figure 13. Survey Respondent Feedback on Personal, Professional, and Community Relationship Supports

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

When responding to questions regarding support found from neighbours during the pandemic

- 18% of participants believed they could not rely on their neighbours. 10% believed that neighbours could not count on them. 13% believed that in an emergency, their neighbourhood would not help those they did not know. 11% believed that the neighbourhood does not accept people from different backgrounds. 22% believed that they could talk to someone in their neighbourhood. Based on these findings, there is a need to increase neighbourhood community bonds and relationships.

When asked separately whom survey participants first approach when they need help

- A quarter of respondents mentioned family members, with the rest citing friends. This notable imbalance underlines the importance of social circles as protective factors in mitigating crisis and concern.
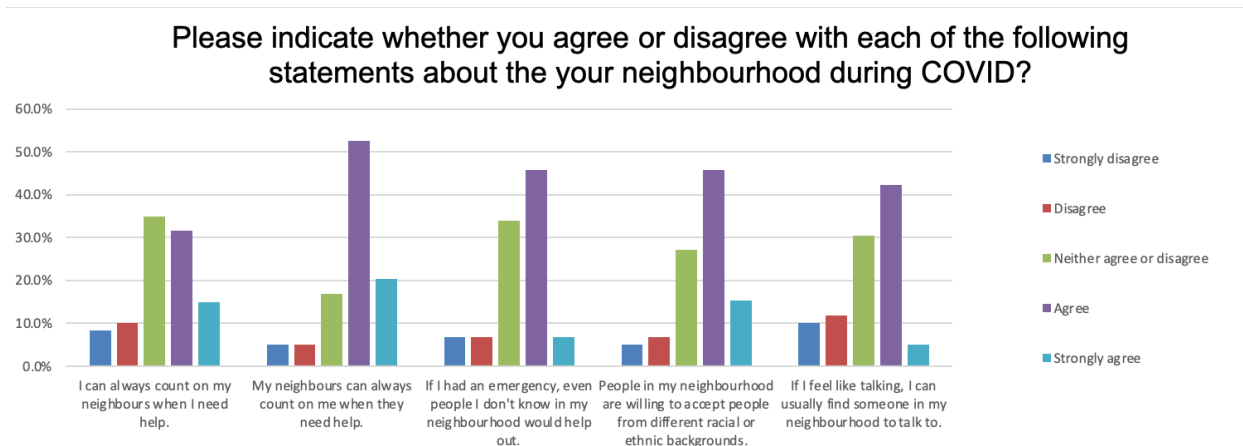
Figure 14. Survey Respondents on Neighbourhood Support

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

4.4 Gaps and Barriers due to COVID-19

While participants discussed a need for improved communication of ministry guidelines, paid sick leave to encourage COVID-19 testing and transmission and increased financial assistance supports and programs, nearly one-fifth of key informants interviewed had not encountered any significant barriers to addressing or preventing COVID-19 in their organizations. In addition, the majority of focus group participants said they had not experienced any serious cultural or language challenges deterring them from availing services during the pandemic. However, availability to testing and healthcare and increasingly long wait times due to lockdown were issues reported by most. It was

also mentioned that COVID-related delays in immigration services led to problems obtaining health care by a few focus group participants.

Community stakeholders actively involved with or apart of the South Asian community cited language and cultural barriers multiple times in interviews and were also concerned about misinformation about the disease, accessible communication strategies for prevention, and the efficacy of vaccines.

Another barrier discussed was the plight of South Asian international students struggling to navigate through the current crisis without adequate social and financial support and worries regarding accommodations, jobs and healthcare and, to some extent, complicated immigration processes and terms. These issues resonated most with one focus group specifically, where all participants were international students.

Also discussed was the social and cultural structure of South Asian homes and families and the social and cultural fabric of multigenerational households. It was discussed that if a woman in such a household gets infected, the entire household ultimately gets affected, because as a matriarch, the family members of her household are, for the most part, very dependent on her. In these cases, it was discussed that it is acutely challenging for women to isolate at home while also being difficult to leave when required to stay at an isolation center.

Multiple barriers and gaps exist for marginalized members of the Brampton community, particularly its predominant South Asian population. Although largely systemic and reflective of underlying socio-economic factors (such as precarious employment and overpopulated households), more immediately achievable supports and interventions can be explored, such as culturally responsive communication strategies, inadequate family supports to overburdened individuals and targeted community sensitization to ensure popularly held beliefs and dominant cultural discourses do not impede efforts to reduce the spread.

4.5 Reflection

Based on the results of the survey, several key findings should be explored. First and foremost, were the concerns regarding employment and financial stability among respondents. There were a large number of people unemployed (32.8%) and many who were working part-time, possibly die to reduced hours (23.3% of those who work). Many that are currently employed feel tremendous pressure to continue working, cope with unrealistic time constraints, and experience low support from employers (15%).

Overall, some survey respondents had a high school degree as their highest level of education (13.8%); however, most were distributed between having a college diploma (22.4%), bachelor's degree (24.1%), and master's degree (29.3%).

When responding to mental health, social isolation, and barriers to mental health services, many respondents indicated current stressors in their life such as schoolwork (35%), I.T. problems (50%), financial (50%) and food insecurity (25%). Roughly half of the respondents also indicated that they

do not have a social bubble or circle (48%), increasing the potential for social isolation. Additionally, there were some barriers to healthcare and testing, including barriers to accessing a computer with internet (5%), not receiving information about COVID-19 and relevant guidelines (30%), and lacking access to a car for transportation (19%). Some respondents also indicated that testing was inconvenient for them (29%). Concerns relating directly to increased COVID-19 transmission were apparent in the survey responses, with some respondents having not received information about viral transmission and current testing guidelines.

Additionally, many are employed in essential jobs or services (60%) or have to work on-site (some with ≥10 people (22%). Many respondents do not have paid sick leave (42%), and therefore do not have time for testing or would not feel able to self-isolate if they tested positive (18%). Some respondent's children also must attend daycare (34%), and there may be some overlapping of social bubbles within those responding to the survey. Generally, these bubbles contained 5 people but included 3 households.

The survey indicated room for improvement in building neighbourhood supports and improving accessibility and outreach in community agencies (18%). Many participants reported having between 1 to 6 individuals who belong to a vulnerable demographic, such as senior or immunocompromised. Within the survey itself, underrepresented groups included people under the age of 18 or within the 18-25 age group (7%), racial and ethnic groups, people with disabilities (7%), and people within the LGBTQ+ community (13%). Additionally, it is important to note that a significant portion of respondents answered "other" when asked whether they live in the L6X or L6V area code (28.4%) and written-in responses indicated that many lived in different area codes. These respondents were not removed from subsequent survey responses.

5. Findings and Discussion: Secondary Sources

5.1 Socio-Economic Characteristics of the Residents in the Brampton Community

This section provides a comparative analysis of (selected) demographic and socio-economic characteristics of the high priority communities in Peel Region. The source of the data in this section is the 2016 Census of Canada and Portraits of Peel, 2021.

Table 3. City of Brampton and Peel Region Population Growth and COVID-19 Statistics

Time Period[5]	L6V	L6X	Brampton Community (L6V + L6X)	City of Brampton	Peel Region
Population 2018	42,910	78,400	121,310	677,590	1,498,520
Population 2016	41,853	67,070	108,923	593,638	1,381,739
Change 2016 - 2018	2.5%	17%	11%	14.1%	8.5%
COVID Testing Rate Per 1,000					
Jan 05-11, 2021			21.1%		
Jan 12-18, 2021			20.0%		
Change			-1.0%		
% COVID Positivity					
Jan 05-11			14.5%		
Jan 12-18			12.4%		
Change			-2.1%		

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[5] *The COVID numbers presented in this file are based on the January 25th Ontario Laboratory Information System (OLIS); given the dynamic nature of the OLIS database, the numbers may change when based on older or more up to date OLIS data, Received from Punjabi Community Health Services.*

Highlights

- Brampton Community's population is growing at a faster rate than Peel Region.

- Between 2016 and 2018, Brampton Community's population grew by 11% compared to 14.1% in Brampton and 8.5 % in Peel.

- Between Jan 05-11 and Jan 12-18, 2021, the COVID testing rate declined by only 1 per 1,000 persons, and the positivity rate declined by only 2.1 per 100 persons.

Implications

- Increased demand for all COVID-19-related services (especially for testing, COVID-19 awareness programs, transportation, employment, health services, and social services).

Table 4. Cultural Diversity: Brampton Community, City of Brampton and Peel Region, 2021

Diversity	L6V	L6X	Brampton Community (L6V+L6X)	City of Brampton	Peel Region
Number (#)					
Immigrants	18,960	33,710	**52,670**	308,790	706,835
Recent immigrants (2011-16)	2,445	3,935	**6,380**	39,915	94,105
Visible Minorities/Racialized Communities	23,805	46,535	**70,340**	433,230	854,565
Percentage (#)					
Immigrants	45.4%	50.7%	**48.7%**	52.3%	51.5%
Recent immigrants (2011-16)	5.9%	5.9%	**5.9%**	6.8%	6.9%
Visible Minorities/Racial Communities	57.1%	70%	**65.0%**	73.3%	62.3%

Highlights

- Brampton Community is more racially diverse than Peel Region. Brampton Community had 65% of its population reporting themselves as visible minorities, compared to 73.3% in Brampton and 62.3% in Peel.

- In 2016, 48.7% of Brampton Community's total population was comprised of immigrants, a figure lower than the respective Brampton figure of 52.3% and Peel figure of 51.5%.
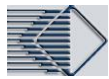
Implications

- Increased demand for culturally appropriate services, equal opportunity, social justice, racial harmony, etc.

Table 5. Visible Minority Groups: Brampton Community, 2021

Minority Group Details	Brampton Community (L6V and L6X Postal Codes)	
Total - Visible minority for the population in private households - 25% sample data	108,180	100.0%
Not a visible minority	37,830	35.0%
Total visible minority population	70,340	65.0%
South Asian	**35,190**	**32.5%**
Chinese	1,810	1.7%
Black	**17,825**	**16.5%**
Filipino	**4,520**	**4.2%**
Latin American	3,100	2.9%
Arab	960	0.9%
Southeast Asian	1,620	1.5%
West Asian	700	0.6%
Korean	100	0.1%
Japanese	115	0.1%
Visible minority; n.i.e.	2,490	2.3%
Multiple visible minorities	1,930	1.8%

Highlights

- In 2016, the three largest groups of visible minorities in the Brampton Community were South Asians (35, 190), Blacks (17,825), and Filipinos (4,520).

Implications

- Increased demand for culturally appropriate services, equal opportunity, social justice, racial harmony, etc.

Table 6. Vulnerable Groups: Brampton Community, City of Brampton and Peel Region, 2021

Vulnerable Groups Due to COVID-19	L6V	L6X	Brampton Community (L6V+L6X)	City of Brampton	Peel Region
Number (#)					
Prevalence of low income based on the Low-income measure, after-tax (LIM-AT) (%)	5,940	6,885	**12,825**	66,960	175,980
Seniors (65+)	5,175	6,595	**11,770**	30,720	176,820
Lone parent families	2,870	3,350	**6,220**	28,565	65,660
Unemployed person	1,905	3,100	**5,005**	26,545	61,640
Percentage (%)					
Prevalence of low income based on the Low-income measure, after-tax (LIM-AT) (%)	14.2%	10.3%	**11.8%**	11%	13%
Seniors (65+)	12,4%	9.8%	**10.8%**	11%	13%
Lone parent families	24.6%	18%	**20.5%**	17%	17%
Unemployment Rate	8.5%	8.4%	**8.5%**	8%	8%

Highlights

- Brampton Community has a large number of poor people (12,825); seniors (11,770); lone-parent families (6,220).

- Compared to Brampton and Peel as a whole, Brampton Community had a higher proportion of lone-parent families in 2016.

- In 2016, Brampton Community had a higher unemployment rate than Peel.

Implications

- Increased demand for income support, affordable housing, employment training, childcare subsidies, support for the elderly, etc.

5.2 Quality of Life and COVID-19

This section provides a preliminary comparative analysis of COVID-19 relevant indicators across high priority communities in Peel Region. Six (6) high priority communities in Peel, defined by Ontario Health, are included in this section. The findings of this study can be used to inform the development of public policy and the provision of COVID-19 services for high priority communities in Peel. Data on social indicators was collected from Statistics Canada's 2016 Census and is intended to provide insights into the socio-economic characteristics of Peel's high priority communities.
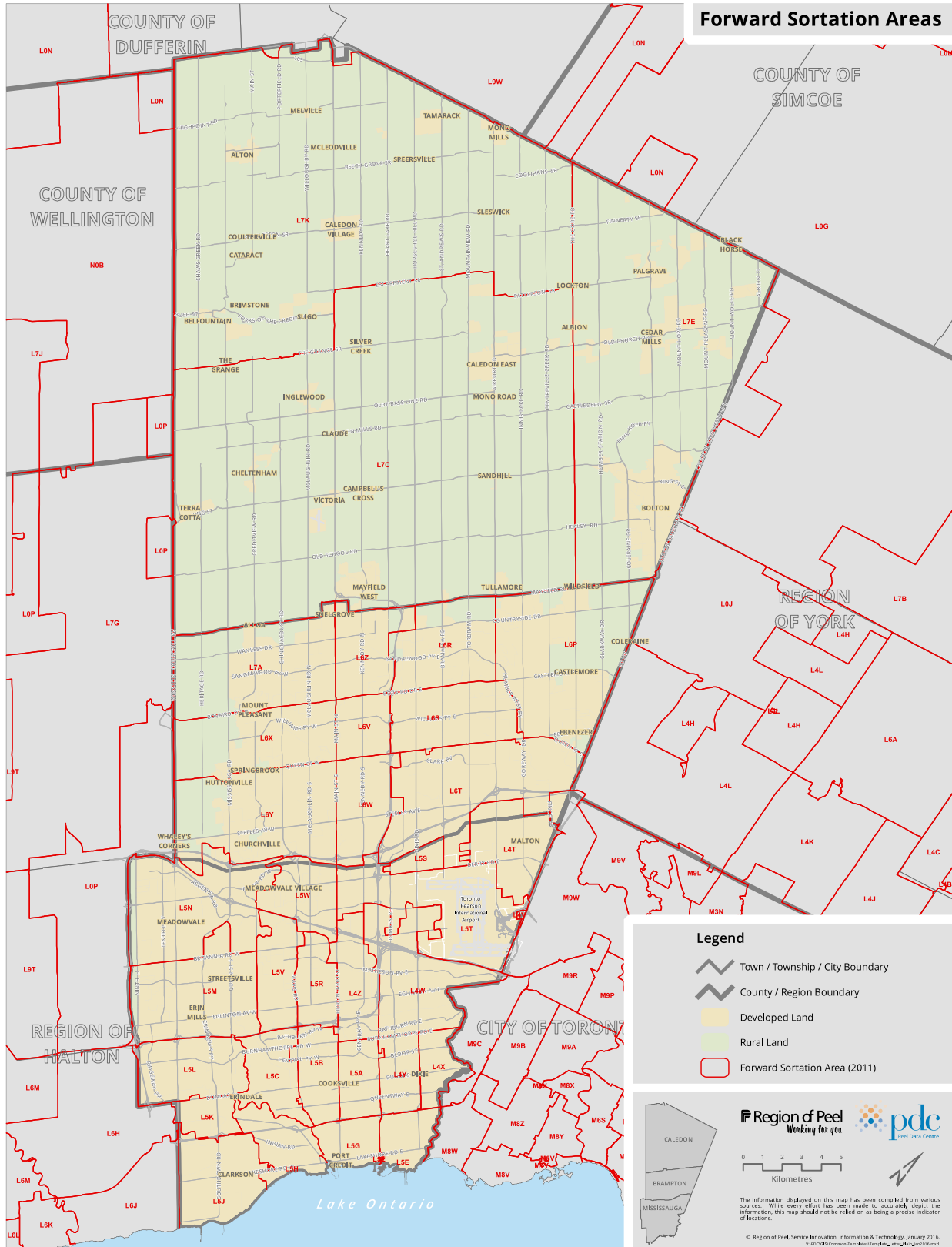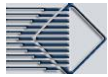
Figure 15. Map of Peel by Forward Sortation Areas (FSAs)

Source: Peel Data Centre, Region of Peel, 2011

Table 7. Socio-Economic Status Indicators: Peel High Priority Communities, 2021

High Priority Community	Forward Sortation Area (FSA.)	Prevalence of low-income households, 2015 after tax (LIM-AT) (%)	No certificate, diploma population aged 15 years and over	Unemployment Rate
Brampton Community	**L6V, L6X**	**11.8%**	**19.5%**	**5.8%**
Bramalea	L6P, L6R, L6T	11.4%	22.0%	5.4%
Malton	L4T	21.7%	25.1%	6.6%
Northwest Mississauga	L5V	12.5%	15.6%	6.3%
Southwest Mississauga	L5C	13.9%	15.3%	5.4%
East Mississauga	L5B, L5R, L4X, L4Z	19.7%	15.4%	5.9%

Highlights

- The communities with the three highest percentages of households living on low incomes were Malton (21.7%), East Mississauga (19.7%) and Southwest Mississauga (13.9%).

- At the community level, Malton has the highest proportion of people (15+) with no certificate or diploma.

- The unemployment rate for Brampton Community was 5.8% and the highest unemployment rate was in Malton (6.6%)

Table 8. Socio-Economic Index (SEI) Peel High Priority Communities, 2021

Peel Higher Priority Communities	Socio-Economic Index (SEI)[6]	Rank	(SEI)
Southwest Mississauga	0.083688	1	Higher
Brampton Community	**0.302876**	**2**	**Medium**
Bramalea	**0.393916**	**3**	**Medium**
Northwest Mississauga	0.430470	4	Medium
East Mississauga	0.441377	5	Medium
Malton	0.944461	6	Lower

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[6] *Note: The closer the "SEI" to "0", the more developed is the neighbourhood, and the closer to "1", the less developed is the neighbourhood.*

Highlights

- Use of the Taxonomic Method of analysis shows that Brampton community has the medium socio-economic status, followed by Bramalea, Northwest Mississauga, East Mississauga, and Malton, respectively.

Table 9. Socio-Economic Status (SES) and COVID-19 Positivity Rate

Level	Positivity Rate Range (%)	Higher Socio-Economic (SES)	Medium Socio-Economic Status (SES)	Low Socio-Economic Status (SES)
Lower	4.5%-7.6%	Southwest Mississauga		
Medium	7.6%-13.8%		**Brampton Community**, North West Mississauga, East Mississauga	Malton
Higher	13.8%-16.9%		**Bramalea**	

Highlights

- Brampton community has the medium socio-economic status and the medium level of positivity rate among 6 high priority communities in Peel.

- The correlation between the socio-economic status and COVID positivity rate is weak and positive (note: the nearer the value is to zero, the weaker the relationship, the value of r is 0.3342, the P-Value is .833147. The result is not significant at p < .05).

- The literature also points to socio-economic status as a significant contributor to the high rates of COVID-19 in the L6X and L6V neighbourhoods in Brampton. It is well documented that those with lower socio-economic status are at a higher rate of contracting diseases (Rangel et al., 2020).

5.3 Spatial Characteristics of the Brampton Community by Photo-Voice Analysis

Those participating in the resident report and community photovoice research were encouraged to document and present the Brampton community and its needs and resources and as they experienced it. While It should be noted that this participatory action research strategy accounts for a small sampling of lived experiences in the Brampton community, the insights discussed may speak to and reflect those of a broader audience in this area. While thoughts and perspectives offered were largely those of isolation, frustration, and a strong desire for a return to normalcy, also revealed were those of hope, gratitude, and a willingness to follow protocols and restrictions. It must also be highlighted that while "a picture is worth a thousand words," pictures are equally

valuable modes of accessible information that can be understood by all, regardless of language, culture or other factors. It is hoped that the following data collection methods may inform and empower.

Resident Report for 9 George St Condo Received on Sat 2021-01-23 8:36 AM

How has the Coronavirus affected us in our condo building?

Before the lockdown, residents used the common facilities, including the pool, weight room and yoga room. The loss of these facilities when one is homebound is immense, especially during the winter months when it is harder to exercise outdoors or socialize with neighbours.

The guest rooms are also not available, so people can not invite family to stay in close proximity. The party room and theatre rooms are also unavailable, as is the outdoor terrace, including the barbecue area.

Much more serious is the elevator system - three elevators for over 304 units. People are asked to wear masks and not overcrowd the elevators, so often it is awkward and potentially dangerous when non-compliance with these rules is experienced. Pre COVID, it had been a pleasure to greet our neighbours and wish them a good day when meeting as we travelled the 27 floors of our building.

We live in a friendly building, but COVID has put people on edge, and unfortunately, we can no longer linger at the mailbox or in the lobby. We have even had to ask security to make sure people are wearing masks in the common area, but the security personnel are experiencing non-compliance and even confrontational responses as they fulfill their duties to keep us safe in our homes.

Fortunately, we have a good current Board of Directors. The previous Board had a few members who thought COVID was not a huge problem, and they wanted to hold our AGM in a crowded party room in March 2020. A Facebook site appeared that seemed to be politically motivated, and one of the Board members was harassed by a small group of people who didn't want to wear masks etc. After this, the City of Brampton created a mandatory wearing of masks in common area by-law for condos, but compliance by both residents and visitors remained and remains an issue.

Many residents in the building use food and product delivery, increasing the potential for virus spread. Condo developments also employ many service industries to maintain and fix our structures; those workers also use our lobby, garage and elevator etc., and some workers have ignored the rules.

We are grateful that we have a balcony - many condo and apartment dwellers do not have this luxury. We also have our own in-unit laundry machines, another luxury that many do not share.

Figure 16. Resident Report
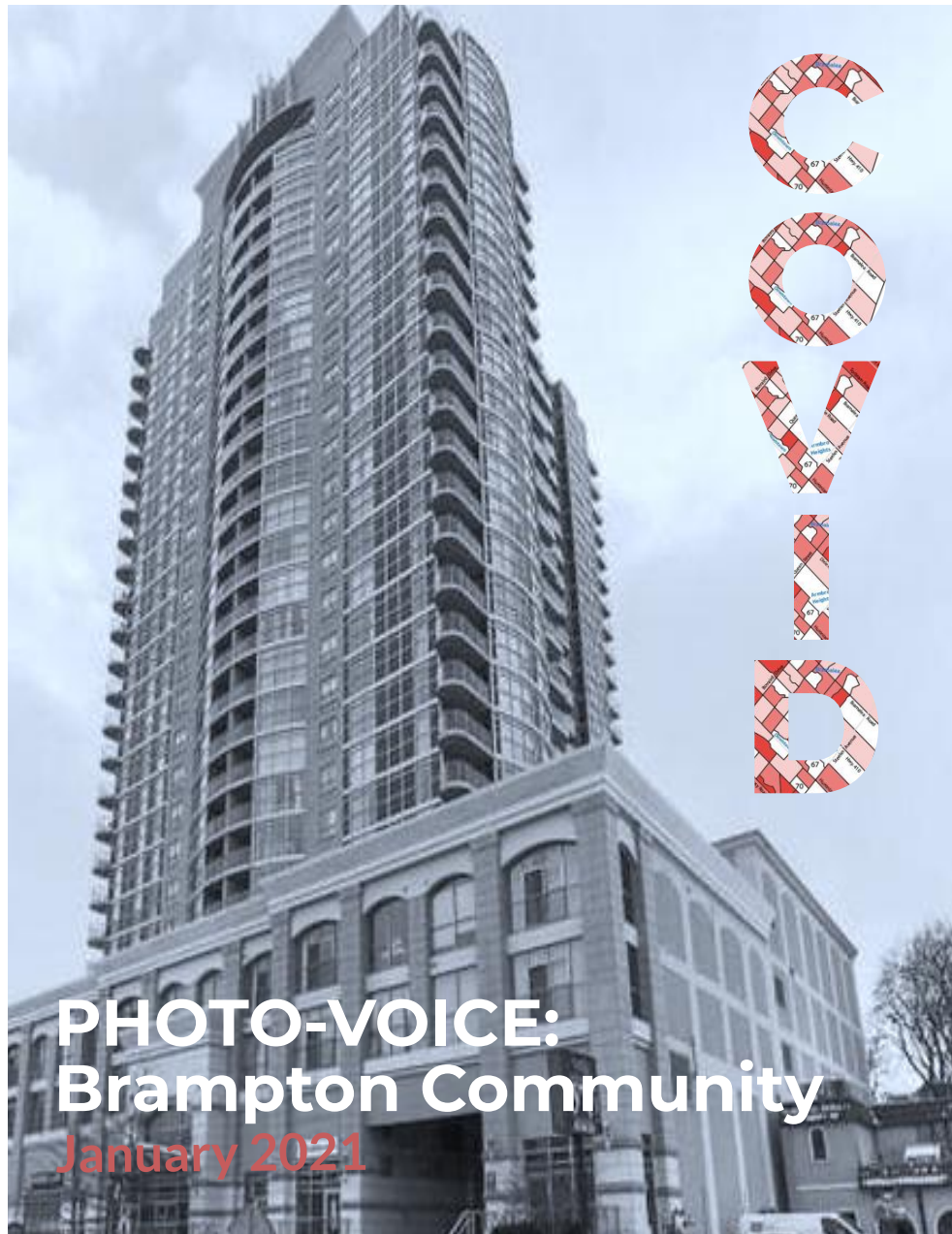
Figure 17. Renaissance Condos Brampton, 9 George Street

A residential building located in the heart of downtown Brampton, in the L6X community. Before lockdown, residents enjoyed frequent use of the common facilities, such as the pool, weight room, yoga room and library. Since the lockdown, these areas serve as stark reminders for all that is missed; the emptiness of these spaces speak to the voids in the lives of many, basic needs for physical exercise and activity, health and wellness, interaction and entertainment. The loss of these once accessible areas has been difficult for residents, especially during the coldest time of the year, when it is more challenging to exercise outdoors or socialize with neighbours outside. While this building was once a place where community residents could gather, connect, relax, and socialize, it has become a place to separate and isolate since the COVID-19 pandemic.

9 George Street: Renaissance Condos Brampton

Figure 18. Common Spaces: Empty, Inaccessible, and Off-Limits

Echoing many individuals' feelings throughout the lockdown – empty, inaccessible and off-limits - these once lively and occupied common spaces are now entirely lacking activity and interaction.

Millstone Parkette

Indian Punjabi Bazaar

Sikh Temple
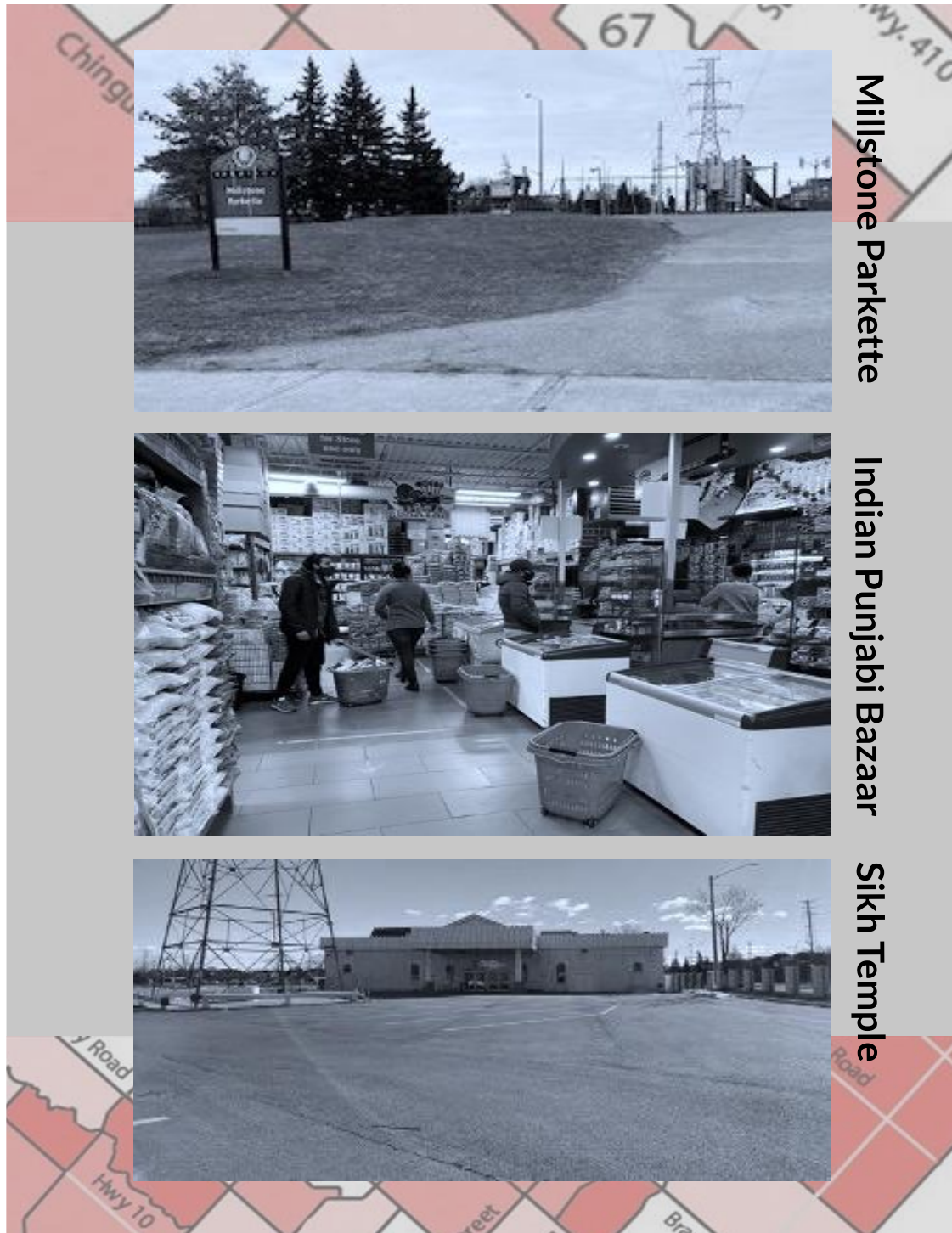
Figure 19. Venturing Out in the Brampton Community

Venturing out in the Brampton community during Ontario's second province-wide shutdown and these public areas previously teaming with activity now appear eerily desolate. Millstone Parkette,

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[7] Photo Credit: Harsahir Singh

once full of children playing and people walking the trail, now stands empty. Similarly, Gurudwara Nanaksir Sahib, a Sikh temple situated in the L6V community, stays deserted, even during Magh, the eleventh month according to the Nanakshai Calendar, a religious time usually full of communal celebrations and gatherings. While the stark desolation of these spaces speaks to the isolation felt by residents of the Brampton community, the emptiness also speaks to a community's willingness to adhere to government restrictions and successfully adopt necessary mandates to keep the broader population safe and stop the spread of COVID-19. When these photos are viewed from a lens of hope and positivity, a timely return to normalcy can be imagined. The only photo in this series relatively full of people is that of the Indian Grocery Store on a January Sunday. While grocery stores are often cramped and challenging to shop in while socially distancing, customers here are seen following regulations and wearing masks, again confirming the Brampton community's willingness to adhere to government guidelines.

5.4 Correlation Analysis of COVID-19 by Selected Cultural and Socio-Economic Variables in Peel

This section provides a basic correlation analysis of COVID-19 by selected cultural-socio-economic variables. It clearly shows that the COVID-19 pandemic has affected several socio-economic and cultural factors, including individuals' quality of life. However, to achieve a fully informed picture of COVID-19 in Peel, more information and analysis are needed.

Table 10. Summary of Correlation: Correlation Matrix of COVID-19 and Racial Groups in Peel

	Testing rate per 1,000 persons	Positivity Rate (%)
Racial Groups	0.438	0.722
South Asians	**0.600**	**0.857***
Chinese	**-0.831***	**-0.829***
Blacks	0.925**	0.641
Non-racial groups	-0.438	-0.723

Note: Data from the Peel high priority communities (6)
*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

COVID-19 and Racial Groups

There is a strong positive correlation between the South Asian community and the COVID testing rates. The positive correlation between positivity rate and the South Asian Community is 0.857, which is very high and significant at the 0.05 level. In contrast to this, the relation between the Chinese community and the positivity rate is highly negative, -0.829 and significant at the 0.05 level. In addition to this, the value 0.925 shows a very high positive correlation among the Black Community and testing rates; however, results are significant at the 0.05 level and high positive rates. Overall, the correlation between positive cases and racial groups is positive 0.722 compared

to negative correlation of -0.723 between the non-racial groups and the positive cases. There were similar studies done in the United States[8] and British Columbia [9] authenticating our study where:

- **Asians were 0.6 times more likely than white counterparts to test positive**

  and

- **Blacks were 1.4 times more likely than white counterparts to test positive**

Table 11. Summary of Correlation: Correlation Matrix of COVID-19 and Selected Socio-Economic Variables in Peel

	Testing rate per 1,000 persons	Positivity Rate (%)
Living in not Suitable apartment	0.729	0.250
5 or more persons living in a household	0.186	0.742
Persons with no Certificates or diplomas	**.929****	0.690
Persons with trades, transport and equipment operators and related occupations	**.830***	0.727
Persons working in transportation and warehousing industries	**.814***	**.842***
Truck drivers	-0.503	0.427
Persons with no English or French	0.373	0.551

Note: Data from the Peel high priority communities (6).
*. Correlation is significant at the 0.05 level (2-tailed).
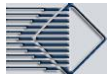****. Correlation is significant at the 0.01 level (2-tailed).**

Highlight: COVID 19 and Selected Socio-Economic Variables in Peel

- A study of a variety of indicators helped us to understand the factors that show strong positive relation with COVID-19 cases. There is a positive correlation between the people residing in not suitable apartments and the testing rates. However, the value 0.742 shows that there is a strong correlation between the 5 or more people living in a single household and the number of people testing positive.

- The data shows that there is a positive correlation between persons with no certificates or diplomas and the positivity rates. A study has documented that there is a positive relationship between educational attainment and occupational exposure to disease or infections score.[10]

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[8] https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1003379
[9] Source: https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html
[10] Xavier St-Denis. (2020). Sociodemographic determinants of occupational risks of exposure to COVID-19 in Canada. The Canadian Review of Sociology, 57(3), 399-452. doi: http://dx.doi.org.subzero.lib.uoguelph.ca/10.1111/cars.12288

- Another shocking correlation is between the positive cases and working in the transportation sector. It is recognized that People holding essential roles, usually from lower-paying jobs, such as public transportation operators or grocery store or pharmacy clerks, are more exposed to the public and thus also to being infected (Shadmi et al. 2020)[11]

- The correlation between truck drivers and positivity is positive as the value is 0.427, and a majority of community cases have been linked to contact with long-distance truck drivers. A Study in Uganda has shown that among the 442 cases that have tested positive, a majority, 317 (71.8%), were truck drivers.[12]

- Moving further, the value 0.551 shows that there is moderate correlation between the linguistic approach as between no English/ French-speaking and the positive cases

5.5 Reflection

The taxonomic method is used to measure and analyze variations among the communities with respect to the impact of COVID-19 in Peel. The findings of this section reveal many differences among higher priority communities. The information contained in this report for COVID-19 data (testing & positivity rates) is based on only the January 25th Ontario Laboratory Information System (OLIS) provided by PCHS. It is hoped that this information will be used in conjunction with other relevant health information about Brampton community and the surrounding environment.

This analysis of the socio-economic status of different communities in Peel provides policymakers and community service workers with a picture of the strengths and challenges that characterize those communities. The principal value of this analysis is that it can be used to inform decision-making about priorities for COVID-19-related social services and community development in Peel Region. It is hoped that this study will provide new insights and directions for improving the quality of life in Peel. The following questions need to be considered in our future steps:

? **What kinds of social problems are likely to emerge in these high priority communities in Peel?**

? **What kinds of social policies and services related to COVID-19 are best suited for Peel Region, specifically the Brampton community?**

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[11] Shadmi, E., Chen, Y., Dourado, I., Faran-Perach, I., Furler, J., Hangoma, P., Hanvoravongchai, P., Obando, C., Petrosyan, V., Rao, K. D., Ruano, A. L., Shi, L., de Souza, L. E., Spitzer-Shohat, S., Sturgiss, E., Suphanchaimat, R., Uribe, M. V., & Willems, S. (2020). Health equity and COVID-19: global perspectives. *International Journal for Equity in Health*, *19*. https://doi.org/10.1186/s12939-020-01218-z

[12] https://www.sciencedirect.com/science/article/pii/S1201971220305221

? **What are the opportunities for connecting residents with businesses, churches, community agencies, governments, schools, etc., in efforts to improve the quality of life for the residents in these communities?**

Further correlation analysis and literature review of the basic findings of the study indicates that the most vulnerable groups among the residents of the Brampton Community are: women; the elderly; unemployed persons; racialized community (especially South Asians); immigrants; newcomers; persons living in unsuitable apartments; 5 or more persons living in a household; persons lacking certificates or diplomas; persons with trades, transport and equipment operators (and related occupations); persons working in transportation and warehousing industries; truck drivers; and people who do not speak English or French.

6. Conclusions and Recommendations

The Social Planning Council of Peel (SPCP) has successfully conducted the needs assessment of the Brampton Community. The findings included COVID-19 and health-related questions (including testing, isolation centres, income supports, food supports, etc.) as well as gaps, challenges, and recommendations. This assessment will help Punjabi Community Health Services (PCHS) to promote access to COVID-19 related services.

Primary Data Collection: Key Findings

The primary data collected through online surveys, key informant interviews, and focus groups highlight the critical concerns and barriers that the Brampton community face when dealing with COVID-19. Key findings from the research reveal prominent concerns related to employment, socio-economic factors, mental health, healthcare and testing, community support, vulnerable populations, social circles, and overall underrepresented groups.

Many participants revealed that they are unemployed or working part-time due to COVID-19, which is leading to financial instability and increasing concerns regarding employment and income. Those employed feel pressure to keep working and deal with unrealistic time constraints and low support from employers. The data also shows that some participants list high school degrees as their highest level of education achieved, which may impede their ability to find stable employment and income. The increased stress from job instability is one of the many factors that can contribute to the concerns regarding mental health.

Mental health related issues were a common concern cited by many participants when evaluating the impact of COVID-19 on their lives. Many shared negative impacts of working from home, such as decreased exercise and exposure to fresh air. Participants also mentioned stressors related to school, work, I.T. problems, and food insecurity. Additionally, roughly half of the respondents indicated that they do not have a social bubble or circle that they see, increasing the potential for social isolation.

Some participants expressed concerns regarding their access to a computer or internet as well as concerns with not receiving information and guidelines about COVID-19. Concerns about access to adequate information can hinder the communities' ability to access appropriate support resources or vital health care services, including access to testing centers. Language and cultural barriers were also mentioned when discussing the barriers associated with access to information.

Participants wish to see improvements in building neighbourhood support. That involves improving accessibility and outreach in community agencies. Different vulnerable groups, such as students or seniors, may benefit from enhanced outreach efforts from relevant agencies in the community.

The fear of COVID-19 transmissions poses many issues and concerns within the community. Participants worry about receiving adequate information about COVID-19 transmission and guidelines for testing. Many work at essential jobs wherein they are obligated to work on-site, some with even 10+people interactions. Furthermore, unpaid sick leave, insufficient time for testing, and the inability to self-isolate (if positive) were important issues brought up by participants. There is also the potential for unsafe overlapping of social bubbles. Those who have to rely solely on public transportation are also at a higher risk. Some parents also have to send their children to daycare, increasing concerns for possible transmission at school and home.

Many participants report having between 1-6 individuals who belong to a vulnerable demographic (senior, immunocompromised, etc.), which raises concern for possible transmission.

Some groups have been underrepresented in the survey, such as those under 18, 18-25 years old, racial and ethnic groups, those with disabilities, and the LGBTQ+ community.

Secondary Data Collection: Key Findings

Secondary sourced data collected through literature reviews, Census Data, and previous research studies revealed prominent findings regarding the growth rate, diversity, and vulnerability of the Brampton Community.

It was found that Brampton's community population is growing at a faster rate than the Peel region. Also, between Jan 05-11 and Jan 12-18, 2021, the positivity rate declined by 2.1%.

It was also notably found that the Brampton Community is more racially diverse than its counterparts in the Peel Region.

Finally, data showed that the Brampton Community has a large number of people struggling with poverty (12,825), seniors (11,770), lone-parent families (6,220) and unemployed persons (5,005). These findings reveal higher levels of associated risks and issues that may affect a variety of vulnerable groups in the Brampton community.

Recommendations

Recommendations formulated from the key findings of the report hope to address the objectives of the assessment. Objectives such as improving understanding and awareness of public health measures and services, including access to testing centers and community support services. Furthermore, understanding the impact of COVID-19 on Brampton residents' socio-economic status and utilizing such information to provide reliable and relevant social and health planning statistics, measurement tools, and overall health services. Finally, the recommendations hope to suggest COVID-19 related interventions that might work in prevention and treatment in the Brampton community.

Table 12. Major Assessment Findings

Focus Areas	Results
PRIMARY DATA COLLECTION FINDINGS	
Concerns about employment and financial stability	Large number unemployed.
	Many working part-time, possibly due to reduced work hours.
	Those employed feel pressure to keep working and deal with unrealistic time constraints and low support from employers.
Socio-economic factors	Some with only a high school degree as their highest level of education achieved.
Mental health, social isolation, barriers to mental health services	Many working from home (may be going outside less often for exercise or fresh air).
	Stressors (school/work, I.T. problems, financial/employment problems, food insecurity).
	Roughly half of the respondents indicated that they do not have a social bubble or circle that they see, increasing the potential for social isolation.
Barriers to healthcare and testing	Some not receiving information about COVID-19 and guidelines.
	Some finding testing inconvenient.
	Some without access to a computer or to a computer with internet.
	Some do not have access to a car for transportation (having to rely solely on public transportation).
Neighbourhood and community support	Room for improvement in building neighbourhood support.
	Improving accessibility and outreach in community agencies.
Concerns about increased COVID transmission	Some have not received any information about COVID-19 transmission and guidelines for testing.
	Many work at an essential job/service or must work on-site (some with 10+ people interaction).
	Many do not have paid sick leave - no time for testing, feel they cannot self-isolate if positive.
	Potential for unsafe, overlapping social bubbles.
	Some do not have access to a car for transportation (having to rely solely on public transportation).
	Some children have to attend daycare.
Vulnerable populations	Many participants report having between 1-6 individuals who belong to a vulnerable demographic (senior, immunocompromised, etc.).

Size of social circles and bubble	3 households on average and 5 people (number of households may be concerning).
Groups potentially underrepresented in survey results	Under 18 and 18-25 years old.
	Racial and ethnic groups.
	Disability.
	LGBTQ+ Community.
SECONDARY DATA COLLECTION FINDINGS	
Growth/Change	Brampton Community's population is growing at a faster rate than Peel Region.
	Between Jan 05-11 and Jan 12-18, 2021, the positivity rate was declined by 2.1%.
Diversity	Brampton Community is more racially diverse than Peel Region.
Vulnerability	Brampton Community has a large number of people struggling with poverty (12,825), seniors (11,770), lone-parent families (6,220) and unemployed persons (5,005).

Table 13. Major Recommendations and Implications

Focus Areas	Recommendations
Provided by Survey Participants	
Increased Awareness on the COVID-19	The issue of lack of awareness came up many times during the online survey, focus group discussions and key informant interviews. The main concern was not just the lack of information available but also the way information was presented. In order to reach out to more people, info related to COVID-19 precautionary measures should be made more readily available, preferably in the native languages of the community. The message should be clear and culturally relevant.
Actively work towards clearing misinformation	Since the pandemic began, there has been misinformation surrounding COVID-19 and its preventive practices. An information session within the community on debunking the myths and misinformation would help people better understand the issue and follow best practices.
Mental Health Services	Physical distancing and stay at home guidelines are taking their toll. Reports of increased struggles with mental health are many, including overstressed parents. Lone-parent families, and those who are isolated and alone, lacking social support and interaction. It should be noted that South Asian women, in particular, reported facing significant mental strain in this current crisis where they are heavily relied on, unequally overburdened with home and work responsibilities, and in some cases, also dealing with increased financial stress due to job loss or reduced hours. Expanded culturally responsive mental health resources would support these and other concerns such as isolation, anxiety and depression.
Use of Social Media	Social media will help propagate information and guidelines related to COVID-19 would help reach the masses and young people particularly. Information about COVID-19 screening procedures shared through social media would help many struggling to navigate the process.

Better Workplace Safety	Precarious workers employed in distribution centres and supermarkets are at high risk of contracting/transmitting COVID-19. Regular workplace inspections should take place to ensure ongoing safety.
Community Development and Service Provision during COVID-19	Brampton community should involve the people that the residents trust and rely on for support (immediate family, friends, relatives, family doctors, etc.). As was mentioned earlier in this report, care must be taken to ensure that the services provided to the Brampton community residents are relevant for their needs and delivered in a manner (content and form) that is culturally appropriate for them. Based on the top priorities among survey respondents, the following services should be provided immediately: health, income supports, employment, food/meals, and information services. A resource hub for the Brampton community should be created to facilitate residents' access to information/services.
Increase Service Collaboration within the Brampton Community	Collaboration is essential, especially among organizations offering COVID-19 related services and those serving South Asians in the L6V and L6X areas. Service providers should provide programs, resources and services related to COVID-19 in a variety of languages and have translators available when appropriate. Feedback should be obtained from our residents and clients to ensure services are being delivered in a culturally appropriate manner. At the macro level, the Canadian government should encourage open communication between institutions, provinces, and municipalities to eliminate citizens' challenges effectively.
SECONDARY DATA IMPLICATIONS	
Growth	Increased demand for all COVID-19-related services (especially for testing, COVID awareness programs, housing, transportation, schools, employment, health services, and social services).
Diversity	Increased demand for culturally appropriate services, equal opportunity, social justice, racial harmony, etc.
Vulnerability	Increased demand for income support, affordable housing, employment training, childcare subsidies, support for the elderly, etc.

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Appendices

Appendix 1. Technical Notes

Data Analysis Method: The Taxonomic Method

The Taxonomic Method was used to determine the level of socio-economic status of each neighbourhood of Peel. The Taxonomic Method, which was designed by a group of Polish mathematicians in 1952, enables the determination of homogeneous units in an 'n'- dimensional space without having to employ statistical tools such as regression and variance. It was recommended in 1968 to the United Nations Educational Scientific Cultural Organization (UNESCO) as a tool for ranking, classifying and comparing countries by levels of development. The "measure (SEI) of development is a function of the "pattern" and "critical distance" from the ideal neighbourhood. It is non-negative and lies between 0 and 1 (in the majority cases). It may exceed 1 (some cases) but always non-negative. The closer the "measure" to "0", the more developed is the neighbourhood, and the closer to "1", the less developed is the neighbourhood.

Definition of Forward Sortation Areas (FSAs):

Forward Sortation Area (FSA) refers to the first three characters of the postal code. FSAs are associated with a postal facility from which mail delivery originates. The average number of households served by an FSA is approximately 8,000, but the number can range from zero to more than 60,000 households. This wide range of households can occur because some FSAs may serve only businesses (zero households), and some FSAs serve very large geographic areas.

For more detailed definitions, please visit Statistics Canada's 2016 Census Dictionary:

https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/index-eng.cfm

Appendix 2. Additional Tables

Table 14. Summary of COVID-19 Issues and Challenges Faced by Residents

Impact of COVID-19	53.4% of respondents indicated that there has been a moderate (30.7%) or major effect (22.7%) on people in their neighbourhood.
Guidelines Related to COVID-19	80% of participants feel their community takes recommendations and guidelines related to COVID moderately to extremely serious.
	90.2% of participants indicated that they follow COVID guidelines, which is necessary for reducing the risk of transmission of COVID-19.
Social Circles and Bubbles	A relatively equal number of respondents have a social circle/ bubble (51.6%) as those who do not (48.4%). While the effectiveness of their self-regulated social bubbles is yet to be seen, there are also concerns for those who find themselves entirely isolated. Those in extreme isolation are at risk of mental health concerns as they lack sufficient social networks and supports.
	For individuals who do have social circles, bubbles or people they interact with regularly, on average, there are roughly 5 people and 3 households reported within these circles. Limiting social bubble interactions is essential when considering that multiple households within an individual's social bubble can more easily spread COVID-19 transmission, especially when accounting for overlap between groups of households.
	77.5% of participants interact with fewer than 10 people at work.
	22.5% of participants interact with 10+ people at work, which is a considerable percentage. Interacting amongst many individuals in the workplace potentially risk for COVID-19 spread, which can't be ignored.
COVID-19 Test	Most have an awareness and knowledge of where to receive COVID-19 testing (83.9%); this indicates that information is being received fairly well.
	Testing centres were reported as convenient for most (71%). However, 29% indicated that they find it inconvenient, which could deter testing.
	If they tested positive, most participants responded that they are able to self-isolate at home (82.3%), but 17.7% indicated that they could not. The considerable percentage of participants who are unable to self-isolate may indicate an increased risk of transmission.
	20% of participants reported that their employers do not allow time off work to get tested, which may incur an increased risk of transmission.
COVID-19 Awareness /Education Programs	29% of participants reported that they have had no access to COVID-19 education programs/awareness, which produces a risk of misinformation and improper protocols.

COVID-19 Vaccine	Only 60% of participants intend to get the COVID-19 vaccine. A large population said no or preferred not to answer (38%); therefore, a large population will still be left susceptible when vaccines are delivered.
	In terms of perceptions of the COVID-19 vaccine, 33.9% agreed that the COVID vaccine is safe and effective, and 51.6% responded that they were neutral, while 14.5% disagreed that it is safe and effective. A considerable percentage of respondents being neutral or disagreeing with the safety and efficacy of the COVID19 vaccine may indicate an area of need for vaccine safety and efficacy education.
	In response to whether they felt pressured to get tested, even when not sick - 19.67% agreed that they do feel pressured, 9.84% strongly agreed, 21.31% disagreed, and 9.84% strongly disagreed, while most remained neutral (39.34%).
	46% agree that they would be more likely to get tested for COVID if testing was available at home (could be a possible way to improve testing). 50% agree that testing is uncomfortable (a potential deterrent to testing).
	45% worry they may receive false results, which is a possible deterrent to testing. 62% agree that regular testing may prevent false results; however, this may not be feasible. If testing was available at everyday places (i.e., grocery stores), 66% agree that it may improve testing. Finally, if there was a COVID cure, 60% agree that they would be more likely to get tested.
Perception about Services offered during COVID-19	School service/virtual classes - 35% have concerns about education, which could impact mental health.
	Food and Supplies - 25% have concerns about food and supplies, which is important to note for accessibility and food insecurity.
	Childcare/Caregiving - 45% have concerns about childcare/caregiving. This issue could create challenges with returning to work, increased financial stress, etc.
	Emergency response - 15% have concerns about emergency services/responses. Most feel it is operating well.
	Mental health/addiction - 50% have concerns about mental health/addictions. It is very apparent that mental health is not being addressed well during this pandemic.
	Breakfast program - 37% have concerns about breakfast programs (accessibility and food insecurity).
	Income support/Financial assistance - 50% have concerns about income support and financial assistance (financial stress).
	Family counselling - 63% have concerns about family counselling (possible problems with distancing protocols (not seeing family as well as seeing family too much).
	Financial counselling - 54% have concerns about financial counselling (financial stress).
	COVID-19 testing services - 33% have concerns about COVID testing. It could be about inconvenience or accessibility.

	I.T./Technological Support - 50% have concerns about technology/IT problems (important for school/work and entertainment and possibly leading to an increase in stress.
	Government services - 46% have issues with government services.
	PPE - 32% have concerns about PPE. It could be used as an opportunity to improve PPE distribution.
	Transportation - 31% have concerns about transportation.
Access to Physicians and Physical Health During COVID-19	85% of respondents indicated that they do have a family physician, which is relatively high. 15% do not have a family physician, which should not be overlooked. Family physicians can provide a reliable assessment of COVID-19 risks and information on safe practices. It is important to have access to a family physician.
	Most participants believe their physical health about the same.
	95% are feeling stress in their lives, with 55% experiencing extreme to moderate stress. It could have implications on mental health.
Experience with Health Care Services and Hospital	The majority of people found that their experience with healthcare and hospitals was fair (21%), good (33.9%) or very good (22.6%).
Barriers in Health Care System	71.7% responded that they do not have barriers to accessing the healthcare system. However, 28.3% indicated that they face barriers. This is seen as a considerable proportion of respondents facing barriers. In terms of COVID-19 risks, barriers to the healthcare system can prevent the dissemination of key health information and access to testing.
Mental Health Barriers	71.67% responded that they have no barriers when interacting with mental health services, and 28.3% indicated that they face barriers. In terms of COVID-19 risks, barriers to mental health support could increase challenges with social isolation and managing stress during this pandemic.
Health Care Services	53.3% indicated that time constraints are a barrier. Online resources (31.7%), childcare (18.3%) and lack of awareness of resources (28.3%) were also indicated as barriers. A high proportion with a lack of awareness of resources is concerning, as it may limit access to necessary health information and support.

Additional Figures
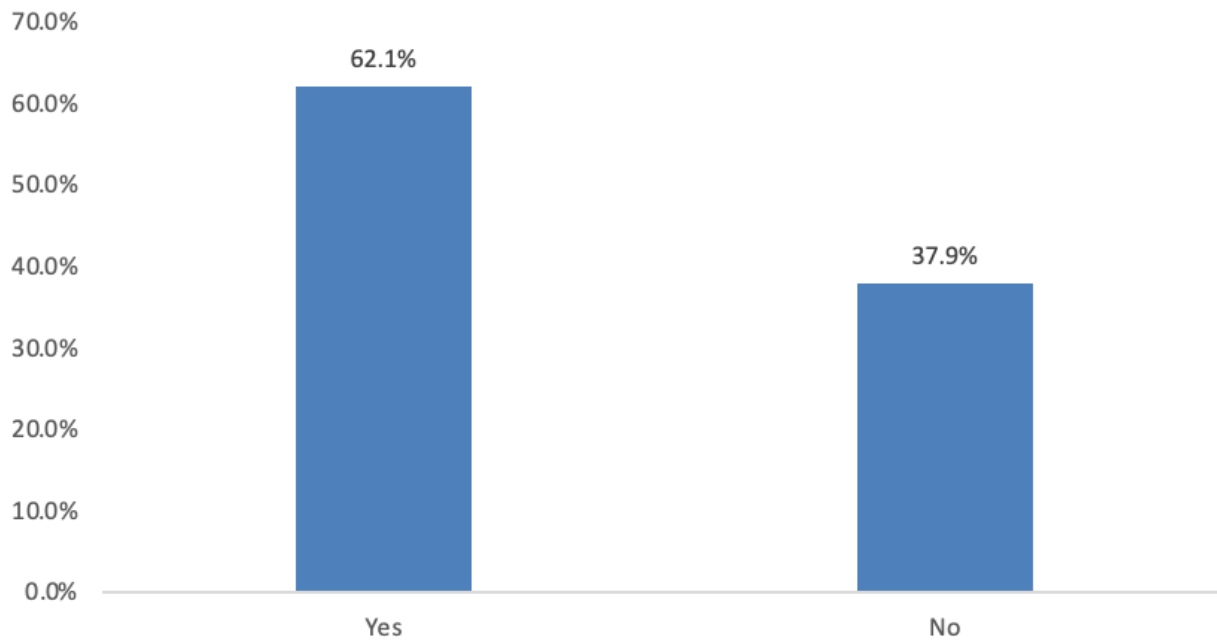
Figure 20. Comparison of Survey Respondents Working Remote vs. Onsite

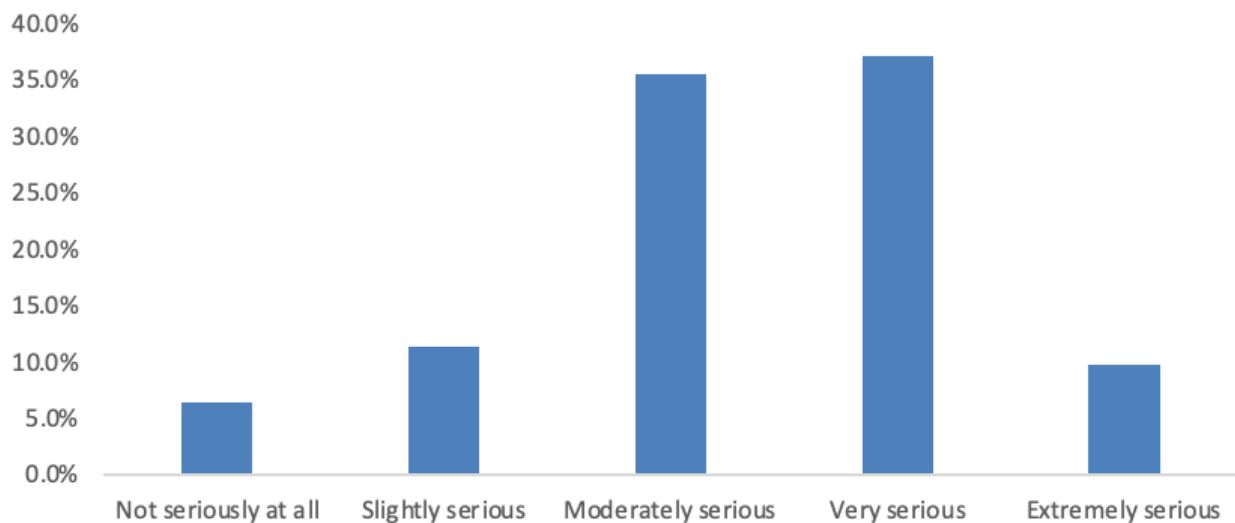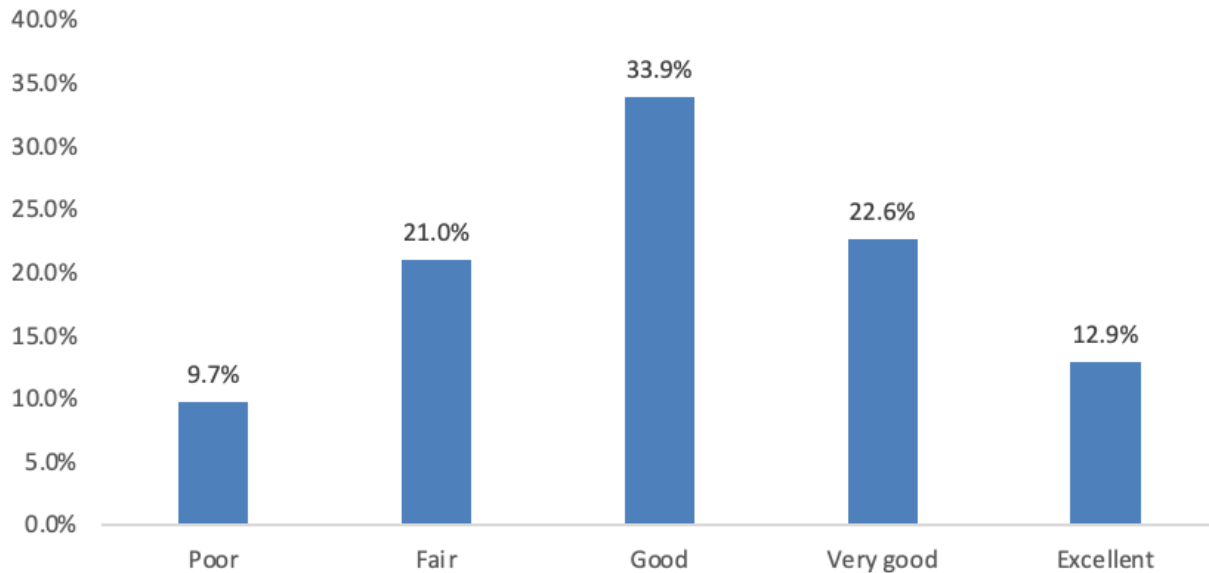Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Figure 21. Survey Respondents on COVID-19 Guidelines and Restrictions

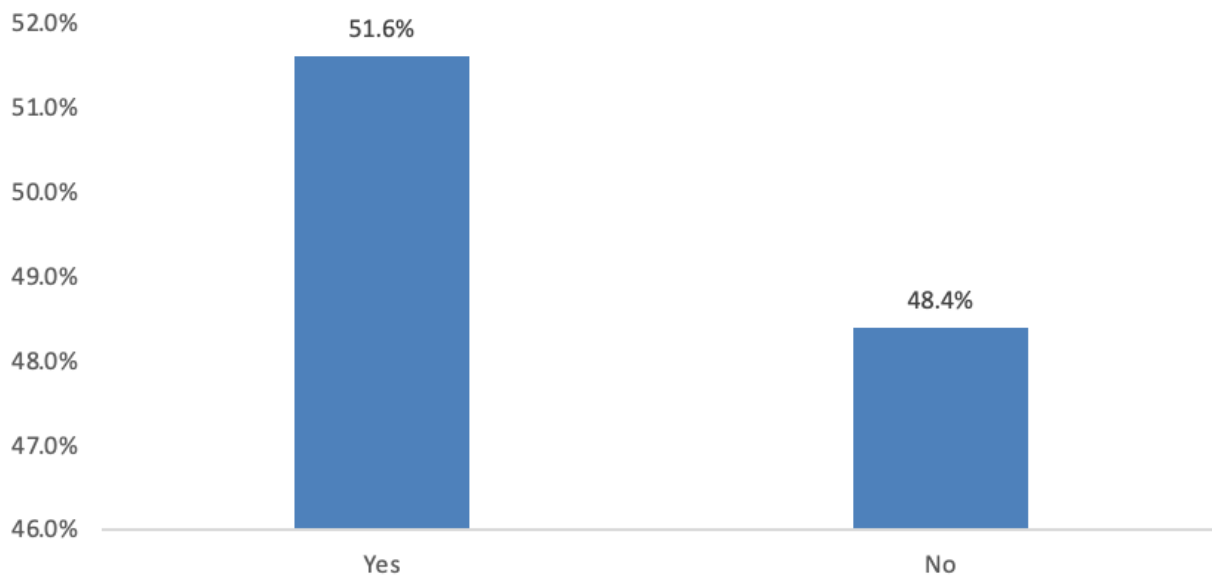Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Please rate your prior experience with healthcare and hospitals

Figure 22. Survey Respondent Experience with Hospitals and Healthcare
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Do you currently have a social circle/bubble or people you see?

Figure 23. Survey Respondents Feedback on Social Circles/Bubbles
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

If you had to get tested for COVID, would you know where to go?
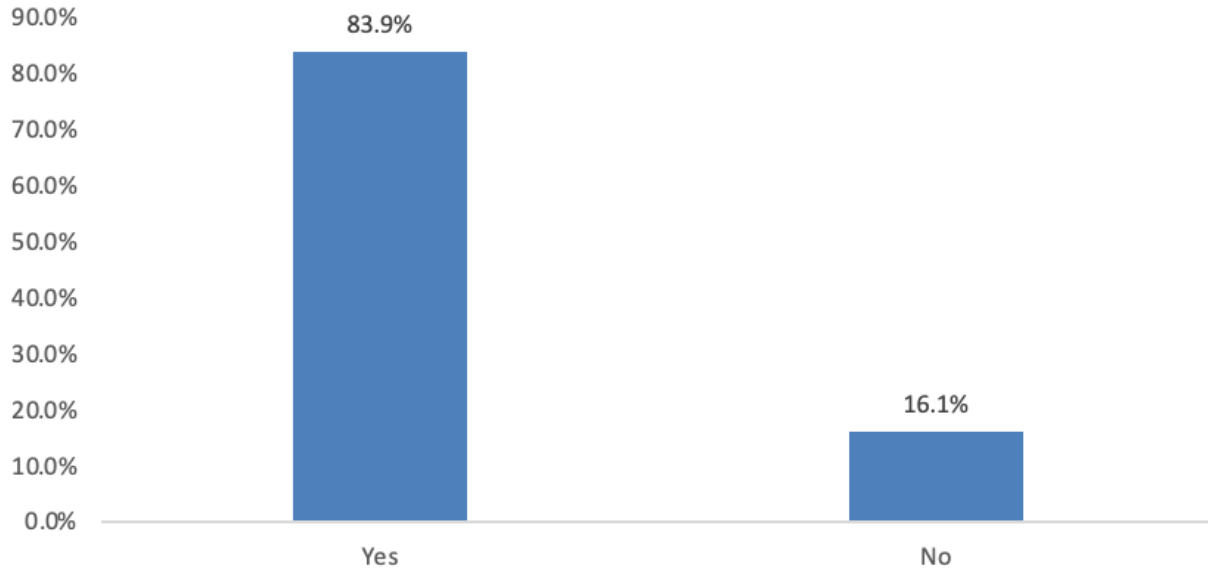
Figure 24. Survey Respondent Decisions on Access to COVID-19 Testing

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Is the testing Centre be convenient for you?
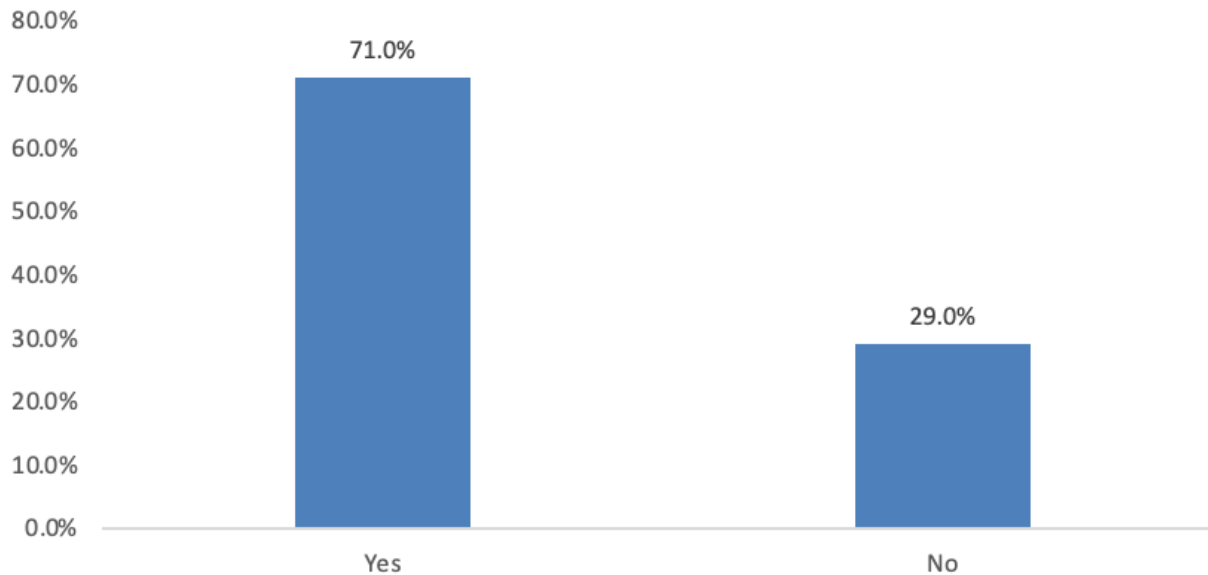
Figure 25. Survey Respondents on Ability to Self-Isolate

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Do you experience any barriers when interacting with the healthcare system?
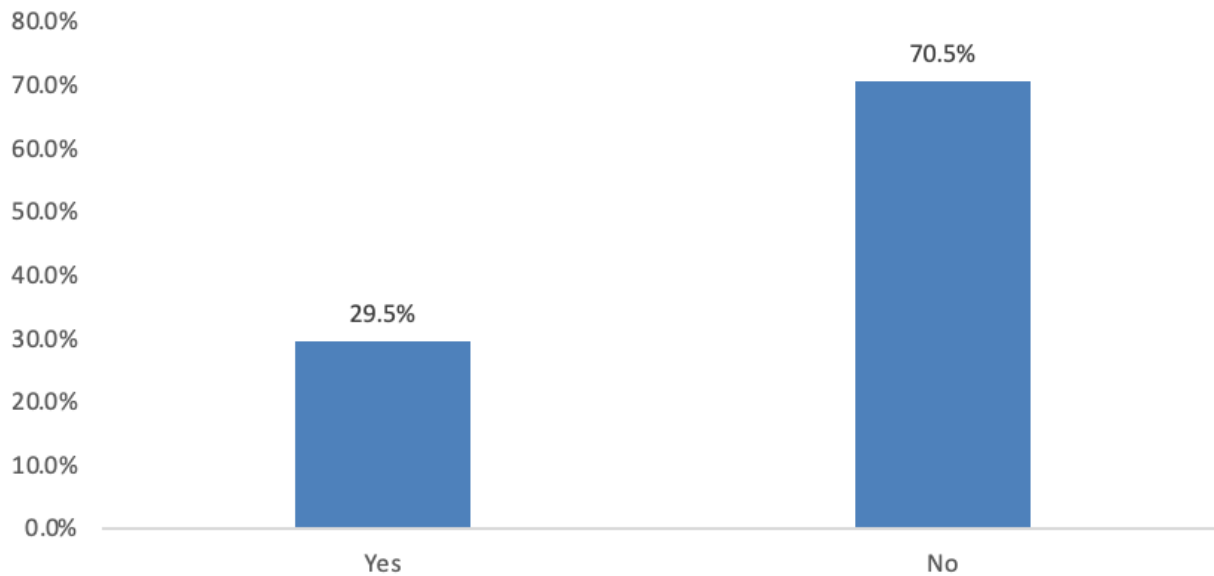
Figure 26. Survey Respondents' Barriers to Healthcare System Interaction
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

If on site, do individuals at your place of employment follow COVID guidelines (Hand washing, mask, 6-foot distancing, ventilation)
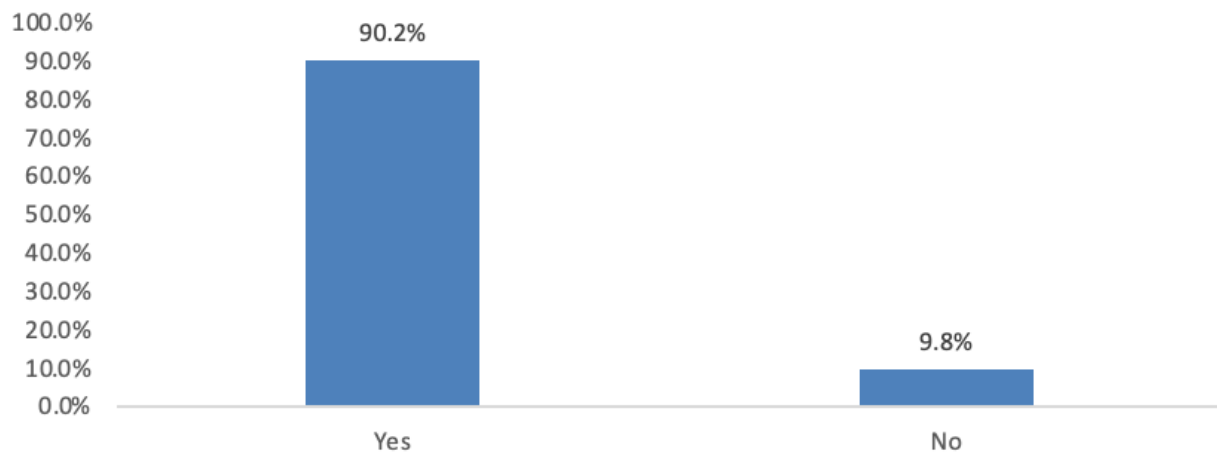
Figure 27. Feedback on Ability to Follow COVID-19 Protocols in the Workplace
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021
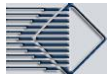
Does your employer allow for time off work to get tested?
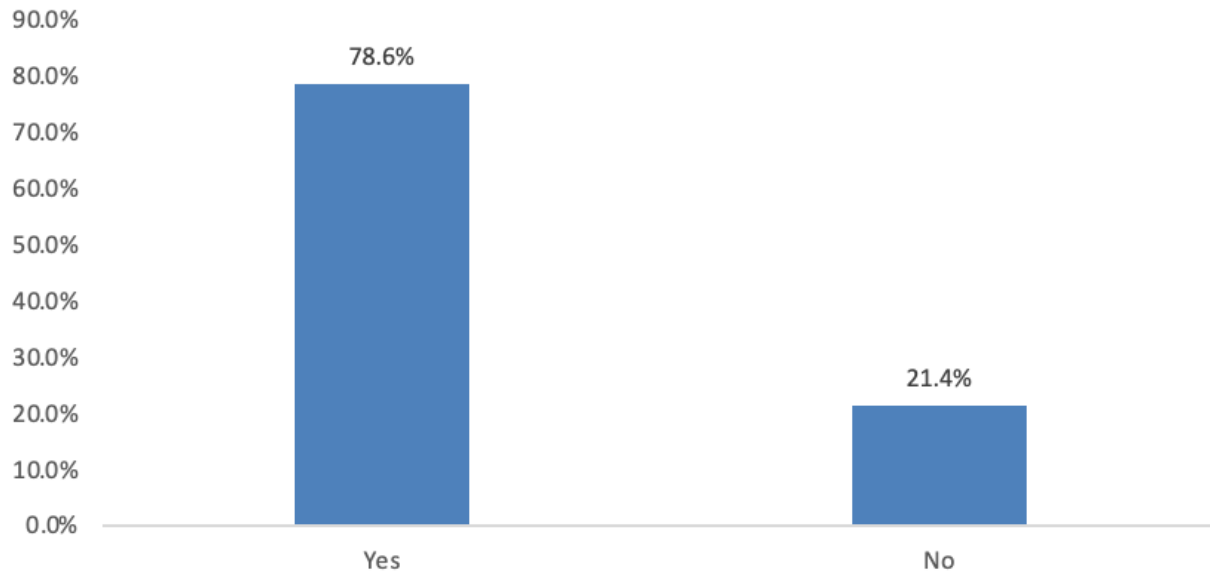
Figure 28. Survey Respondent Feedback on Workplace Provisions for Testing

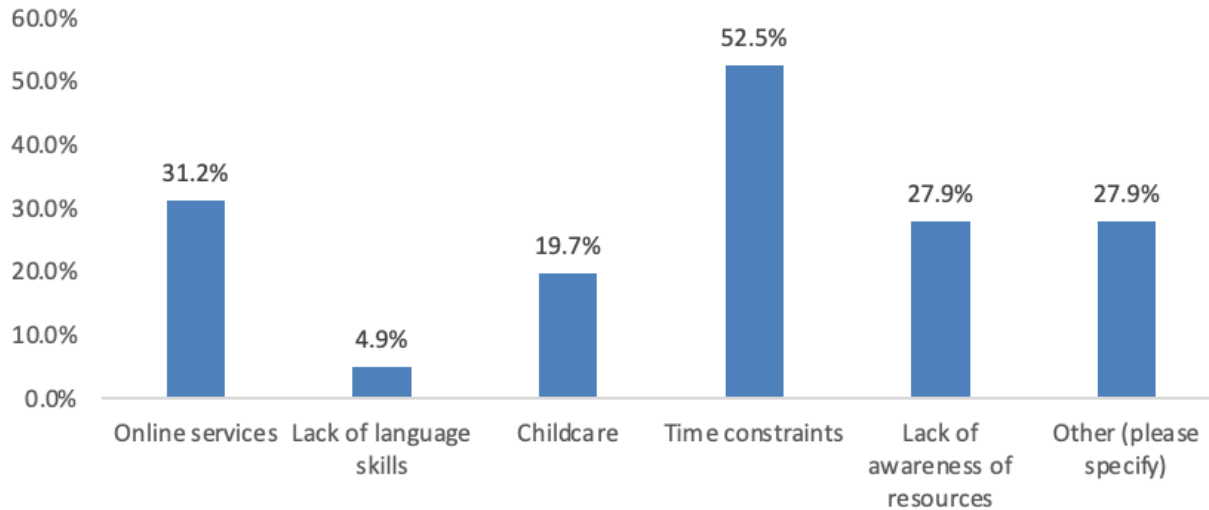Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Do you experience any barriers when interacting with the mental health services?
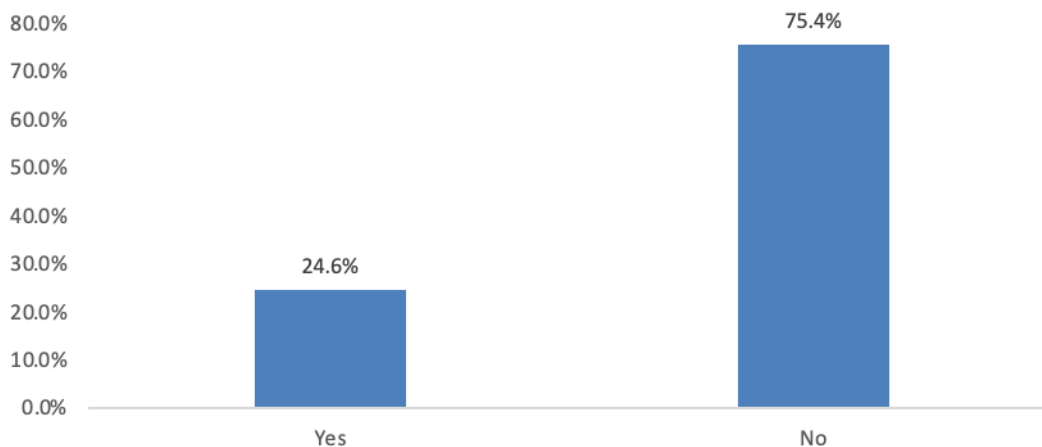
Figure 29. Survey Respondents' Barriers to Mental Health Service Interaction

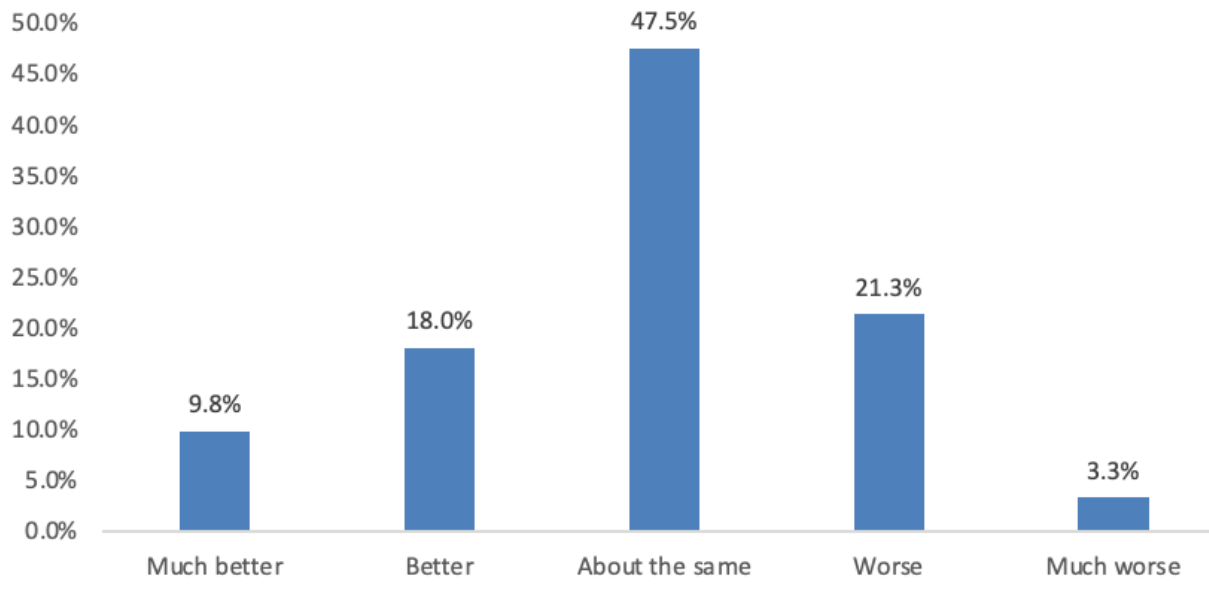Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Do you experience any barriers while availing health care services during COVID? Please select all that apply.

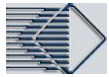Figure 30. Survey Respondent Barriers to Mental Health Services

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

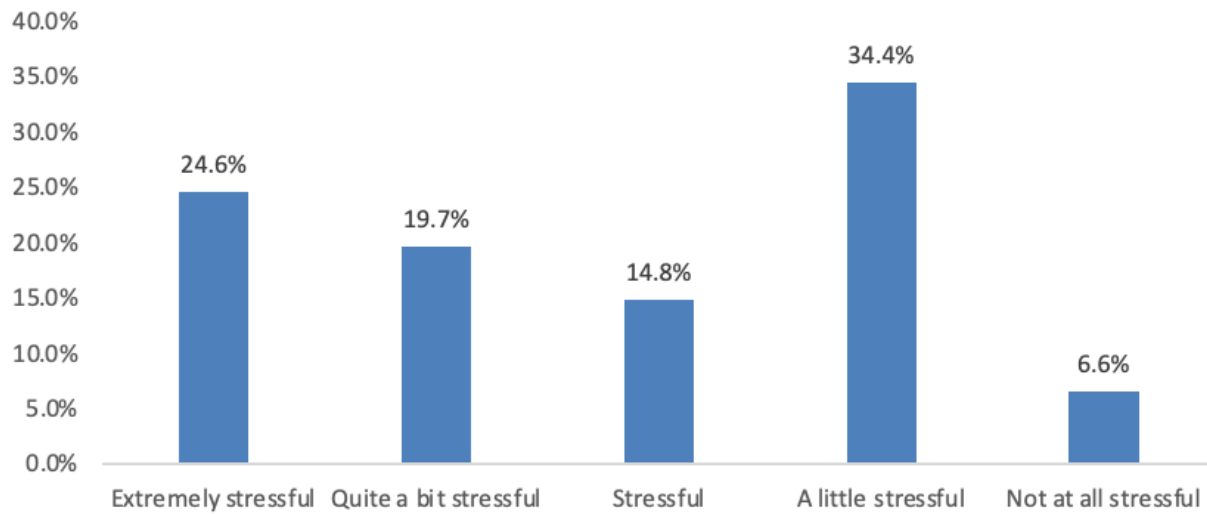## Compared to one year ago, how would you say your physical health is now? Is it:

Figure 31. Survey Respondent Current State of Physical Health

Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021

Thinking about the amount of stress in your life in the current situation, would you say that most days are:

Figure 32. Survey Respondent Feedback on Daily Stressors
Source: Survey of COVID-19 in Brampton Community (L6V & L6X), January 2021