Exploring Canadian Newcomer and Immigrant Parents' Usage and Preferences for Mental Health Services

by

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Abstract

Immigrant and newcomer parents face significant barriers to accessing mental health care in Canada. The present exploratory study investigated the following questions: (RQ1) what motivators and barriers to accessing mental health supports in Canada are reported by immigrant parents, (RQ2) what features would they want included in an online resource, (RQ3) what are the relationships between stressful experiences, family resources, social support, and motivators/barriers reported by immigrant parents, and (RQ4) what are the differences in these variables between immigrant and Canadian-born parents? 152 Canadian immigrant parents were recruited using the online AskingCanadians platform where they were redirected to take an online survey via REDCap. Data was examined using descriptive statistics, correlations, regression, and independent samples *t*-tests. For RQ1, the highest endorsed motivator was wanting to improve one's own parenting skills and the highest endorsed barrier was concerns about financial costs. For RQ2, parents reported wanting to access a shorter program via the web that was delivered and developed by psychologists. For RQ3, immigrant parents' motivators and barriers were correlated with stressful experiences and social support. Regression and moderation analyses further explored these relationships. For RQ4, immigrant parents reported fewer stressful experiences, family resources, and motivators than Canadian-born parents. This research demonstrated that stressful experiences and social support could be worth investigating in future research as possible avenues for reducing barriers and increasing motivators. This study also provided a first step toward creating online resources for parent populations who have greater difficulty in accessing mental health care but are in critical need of it.

Keywords: newcomers, immigrants, family mental health, parenting challenges, service access, service utilization

Positionality Statement

Nicole Tongol is a second-generation clinical psychology graduate student and was born in Canada where she was raised by two proud Filipino Canadian immigrant parents. Nicole is fluent in English and can speak some Tagalog. Nicole has lived experience supporting family mental health in the context of stressors related to immigrant and disability experiences. She is eager to conduct more research with families from underrepresented populations to explore how to make mental health and parenting services more inclusive, safe, and accessible to them.

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Exploring Canadian Newcomer and Immigrant Parents' Usage and Preferences for Mental Health Services

Immigration accounts for around 75% of Canada's population growth, and for almost all of the country's labour force growth, proving to be a vital component of Canada's aging population (Statistics Canada, 2022; Statistics Canada, 2023). In 2011, there were around 6.8 million immigrant individuals in Canada, and around 38% of immigrant women had a partner and children (Statistics Canada, 2013; Hudon, 2015). In 2021, that number had risen to almost 8.4 million, which is 23% of the total Canadian population (Statistics Canada, 2021). Currently, almost a third of all children in Canada have at least one immigrant parent, establishing a diverse and large number of families that include immigrant individuals across the nation (Statistics Canada, 2022).

Despite the important and ever-increasing population of newcomers, immigrant individuals face unique and persistent barriers to accessing mental health resources within Canada (Kalich et al., 2016; Thomson et al., 2015; Salami et al., 2019). Accessing services can be especially difficult for immigrant parents, who may face additional barriers due to the demands of parenting in a new country. For immigrant parents who face these parenting stressors in addition to immigration-related barriers, the need for easily accessible and culturally sensitive mental health care and parenting resources is critical (Costigan & Koryzma, 2011; Miao et al., 2018). With this high proportion of newcomers who immigrate with their children or who may become parents after moving, it is more urgent than ever that mental health researchers explore how we can support immigrant families' mental health, and that mental health services adapt to become more inclusive and beneficial to their needs. Thus, I will explore what specific factors drive newcomer and immigrant parents away from and towards accessing mental health and

parenting resources, and what items we can include in services to make them more accessible to this population.

For the purposes of this research, "immigrant" individuals will refer to all individuals who have immigrated from one country to another, including newcomers (e.g., having moved to Canada less than five years ago) and those who immigrated long ago, for various reasons (e.g., looking for work). The primary focus of this research is also on immigrant experiences for those who are not refugees, as refugees often face traumatic events beyond the scope of the current study. It is possible that some of the immigrant parent sample recruited are refugees, but they were not asked to specify if that was the case, and the questions asked in the survey are not specific to the refugee experience. Also, while most of the literature cited here references immigrants as a whole (e.g., within Canada), it is important to note that immigrants are an incredibly diverse and heterogeneous group, meaning that not every ethnic group of individuals may experience challenges to accessing mental health services in the same way.

Theoretical Framework

This work is informed by both transnational and intersectional theories. Transnationalism is defined as the crossing of national boundaries by immigrant individuals, by creating social spaces that span across borders, just through their daily activities. It is the idea that when an immigrant moves, they do not leave behind their home countries, but instead keep those connections and extend their cultural models within and across the country they move to (Basch et al., 1994; Itizigsohn & Giorguli-Saucedo, 2005). Thus, culture and finding a community that shares that culture in their new country can be a crucial aspect of feeling supported for immigrant individuals. This matters in the context of mental health research and this specific study for a variety of reasons.

Firstly, differing cultures may be an important (albeit under-researched and underrepresented) aspect of mental health services that Canadian providers have not yet fully emphasized or considered. Through this research, I seek to explore whether cultural motivators and barriers are significant to this sample of immigrant parents. Additionally, this idea of participating in one's culture from their home country in a new country also brings about a sense of wanting community with those who share this culture. This is one reason why a measure of perceived social support is included within this research. Informed by this theory, it is apparent that having a sense of community may be an important aspect of supporting immigrant mental health. It is, of course, not realistic to expect that mental health organizations and providers are able to celebrate and highlight every single client's culture in their treatment. However, research like the present study could be used to inform supports for the larger group of immigrants that are helpful, and that would be a crucial first step. Resources that support different groups of immigrant families (e.g., Ukrainian refugees, Filipino OFWs or overseas Filipino workers) can also be informed by research like this, developed in collaboration with immigrant family voices.

This work is also informed by intersectional theory. Intersectionality poses the idea that social categories such as sex/gender, race, and class are not distinct. These systems work together to oppress individuals and produce inequality. They are also experienced by individuals simultaneously (Collins, 1990; Schulz & Mullings, 2006; Viruell-Fuentes et al., 2012). This is important for this research as participants' mental health is experienced through the intersection of their identities – as an immigrant, a parent, perhaps a person of colour, and more. It was important to ground this research in intersectional theory by looking at multiple different aspects of one's identity and experience, and how it can affect their mental health (e.g., interpreting stressful experiences reported by participants but in the context of being an immigrant parent).

Within the context of intersectionality, there is also an argument for a shift in research from individual, culturally-based frameworks to looking at structural inequalities through intersectional experiences (Viruell-Fuentes et al., 2012). This was important for the present research as the goal was not to examine how individual behaviours and cultural norms explain certain experiences (e.g., stigma). The goal was to lay a foundation to eventually understand how systems of oppression and inequality might create or contribute to participant experiences (e.g., fear of discrimination from mental health service providers due to racism, or lack of government supports creating fewer family resources) and how we can adapt mental health services to be more accessible and inclusive. This was another reason why certain barriers and motivators were asked in the survey. It was also one reason why differences were examined between the immigrant parent sample and the Canadian-born parent sample.

Mental Health of Newcomer and Immigrant Individuals

Immigrant individuals often face acculturation stressors that put a strain on their mental health. For example, cultural differences between the immigrant individual and those around them in a new country, social isolation or lack of social support, and unemployment/financial distress all seem to be common items contributing to poor mental health in immigrant populations, including parent populations (Urindwanayo, 2018; Guruge et al., 2015; Delara, 2016; Thomson et al., 2015). Other acculturation stressors such as adjusting to a new lifestyle and grappling with competing identities also seem to exacerbate poor mental health in immigrant individuals (George et al., 2015). However, there is some disagreement in the literature regarding immigrant mental health, with some studies citing higher rates of mental health challenges (e.g., depression) in immigrant populations compared to native-born individuals, while other studies cite lower rates of mental health challenges for immigrant groups (George et al., 2015; Hansson

et al., 2011; Urindwanayo, 2018). It seems that one factor for why this may be is the "healthy immigrant effect," where immigrant individuals tend to have better mental health when they first move, but then it tends to worsen over time (George et al., 2015). It is also possible that the disagreement in the literature is due to immigrant individuals underreporting mental health symptoms. For example, research has found that some immigrants do not trust mental health service providers, do not have access to appropriate services, and hold stigmatized beliefs about mental disorders (Donnelly et al., 2011; Straiton et al., 2018). This may lead to underreporting of symptoms (Roberts et al., 2016; Garcini et al., 2016).

Given that rates of mental health challenges for immigrant populations are less clear and dependent on the geographical area, the ethnic group that is looked at, and which mental health challenge is assessed, results of the research looking at this tend to be complex. However, there does seem to be clear evidence that immigrant individuals are vulnerable to mental health challenges, such as depression and anxiety, due to stressors related to immigration and acculturation (Hansson et al., 2011; Guruge et al., 2015; Delara, 2016; George et al., 2015). Similar concerns have been raised regarding the mental health of immigrant mothers with young children (Urindwanayo, 2018; Bohr et al., 2021). Concerns have been cited for barriers to accessing services as exacerbating their challenges and possible intergenerational mental health challenges as a result of lack of adequate parenting support.

Access to Mental Health Services

Immigrant individuals report a difficulty and hesitancy with accessing mental health services. For example, research on the perspectives of immigrant women in Canada with post-partum depression showed that they faced barriers on multiple levels (i.e., personally, interpersonally with family and service providers, systemically regarding immigration-related

policies, and a lack of family-centred, culturally sensitive care; Ganann et al., 2020). Thus, there seems to be barriers regarding accessibility and discrimination. In contrast, social support has been emphasized as a key factor for immigrant individuals seeking to better their mental health (Guruge et al., 2015; Kingsley, 2020; Alegría et al., 2017; Szaflarski & Bauldry, 2019). This may also prove to be a factor that promotes service-seeking behaviours because it has been established to support immigrant mental health, although further research would be required to reliably determine this as true.

Barriers for Accessing Mental Health Resources

In line with transnational and intersectional theories (Urindwanayo, 2018; Viruell-Fuentes et al., 2017), barriers likely include acculturation stressors, accessibility concerns, isolation, discrimination, and unique parenting challenges. For example, in terms of accessibility, many immigrants have difficulty with finding information about mental health services in the first place, feeling lost about how to navigate the mental health care system (Kalich et al., 2016). Even if they are able to access mental health services, there can be language barriers, as most services within Canada are offered only in English. Given that English is often a second language for immigrants to Canada, they may have concerns that they cannot sufficiently participate and understand the mental health services, they may be embarrassed about their English competency, or they are unaware of or are lacking relevant interpretation services (Kalich et al., 2016; Thomson et al., 2015). Lastly, mental health services can be costly, which can be a large barrier that prevents immigrant parents from accessing mental health services (Kalich et al., 2016).

Parenting resources (as opposed to mental health resources) are less researched in the current literature, but it is clear that stressors unique to immigrant parents (e.g., acculturation)

affect their mental health and the way they parent their children. For example, a sample of Chinese parents in Canada felt less effective in their parenting if they were not as acculturated to Canadian culture, inferring that they may feel less confident about parenting in a different cultural context. The more they struggled with parenting, the higher their reported symptoms of depression, the lower their self-esteem, the lower their life satisfaction, and the less they reported engaging in positive parenting (Costigan & Koryzma, 2011). Additionally, it was found that an increase in acculturation-related stressors also led to less positive parenting, which may be due to the acculturation stressors exhausting parents' emotional resources (Miao et al., 2018). Thus, these stressors that are unique to immigrant parents negatively affect their mental health and may make it harder for them to devote more emotional and mental resources to their parenting.

In addition to systemic-level barriers, there is an additional barrier of discrimination and fear by the immigrant parent themselves, and at a social/relational level from those around them. For example, the fear of prejudice from family and friends regarding accessing a mental health service, and especially with being diagnosed with a mental illness, may be a significant factor that stops immigrant parents from utilizing mental health services (Salami et al., 2019). This stigma is pervasive in some countries, and extends to the individual themselves as well, as some immigrant people will refuse accessing services altogether out of their own negative feelings towards mental illness (Thomson et al., 2015). There is also some fear of cultural insensitivity or discrimination from service providers, with concerns that mental health service providers may have prejudice against individuals over differences in ethnicity, culture, religion, and language more (Salami et al., 2019). For example, some research has shown that language barriers and clashing cultural values for raising children can spark fear of the involvement of child protection services in immigrant families (Alaggia et al., 2017; Maiter et al., 2018). It seems apparent that

barriers exist at multiple levels (e.g., systemic, group, and individual), and should be addressed at multiple levels.

Motivators for Accessing Mental Health Resources

To the best of my knowledge, there is a lack of research that explores specific motivations for immigrant parents wanting to access mental health services. However, it is important to note that some immigrant individuals might be more motivated to seek out alternative supports or practices over Canadian mental health services. For example, some may prefer prayer (Thomson et al., 2015) over medical treatment from a psychiatrist. Different cultures have different ways of knowing and understanding mental health challenges. In a sample of South and East Asian women, some described mental illness as a bad spirit that needed to be taken out. Others described how they used their spirituality and connection to others as healing, as well as a combination of Western and traditional Chinese medicine (Chiu et al., 2005). Thus, there are a variety of reasons why some immigrant individuals might prefer alternative supports or practices over Canadian mental health treatment.

Access and Utilization of Canadian Parenting Resources

There has been some research into the utilization of parenting supports that are more culturally sensitive and thus may be better suited for an immigrant parent population. For example, research on The *Crying Clinic*, a walk-in service Ontario for immigrant parents with peripartum depression (Bohr et al., 2021). The service had a focus on providing services for parents from culturally diverse backgrounds and was able to achieve most of its goals (i.e., making infant mental health services more accessible and understandable to a community of immigrant parents, referring parents in need to other counselling and parenting services). However, more services like The Crying Clinic are necessary to accommodate the growing

immigrant family population in Canada, demonstrating that the adaptation or creation of more interventions/services to be culturally sensitive is warranted. This can be facilitated through the evaluation of immigrant parent perspectives.

A Potential Avenue to Address Accessibility Concerns – Online Resources

The second research question of this research looks specifically at what immigrant parent preferences would be for an online support. The reason why I focused on an online support is because (1) virtual services and interventions have proliferated since quarantine protocols were established for the COVID-19 pandemic and a necessary transition was made to online services, and (2) online supports can help families address critical needs while they remain on waitlists for in-person services (Rioux et al., 2022; Lunsky et al., 2007; Faber et al., 2023). Additionally, online parenting interventions from both before and after the pandemic have found overall positive effects for increasing factors such as parent confidence, supporting positive parent-child interactions, improving parent mental health, and connecting with peers in online programming (Corralejo and Rodríguez, 2018; Spencer et al., 2020; MacKinnon et al., 2022; Rioux et al., 2024). Thus, online programs have proven to be a promising route for addressing concerns that parents otherwise had to address for in-person services (e.g., managing a busy work schedule, arranging transportation and childcare; McGoron & Ondersma, 2015; Grafft et al., 2022; Duppong-Hurley, 2016; Burek et al., 2020).

The Present Study

The apparent challenges presented in the literature demonstrate a need to explore options for making Canadian mental health services more accessible for immigrant parents. The present exploratory study investigated the following questions: (Research Question 1) what motivators and barriers are commonly reported by newcomer and immigrant parents when accessing mental

health and parenting supports in Canada, (RQ2) what features would they want included in an online resource, (RQ3) what are the relationships between stressful experiences, family resources, social support, and motivators/barriers reported by immigrant parents, and (RQ4) what are the differences in these variables between immigrant and Canadian-born parents? 152 Canadian immigrant parents were recruited using the online AskingCanadians platform. Participants took an online survey via REDCap where they answered questions about their mental health, family, parenting challenges, and preferences for services. Data was examined using descriptive statistics (RQ1, RQ2), correlations, regression (RQ3), and independent samples *t*-tests (RQ4). For a table summarizing research questions, hypotheses, and analyses for this research, please see Appendix B.

Operational Hypotheses

Regarding research question one, I expected that immigrant parents' most frequently endorsed motivator would be wanting to improve one's own mental health, as literature has shown there is a need for mental health services, but accessibility is lacking. I also expected that immigrant parents' most frequently endorsed barrier would relate to acculturation stressors (e.g., language barriers; Kalich et al., 2016; Thomson et al., 2015).

For research question two, I hypothesized that immigrant parents would prefer to access an online resource via a phone application, for ease of access and convenience. I also expected that immigrant parents would want a shorter online program, as they may not feel like they have the capacity to dedicate to a longer one due to factors such as needing to accommodate a busy work schedule or childcare (Urindwanayo, 2018; Guruge et al., 2015; Delara, 2016). I then anticipated that immigrant parents would want an expert (doctor, psychologist, social worker) to

develop and lead an online program rather than peers, as discrimination from family and friends has been described in the literature (Salami et al., 2019; Thomson et al., 2015).

Regarding research question three, I expected that stressful experiences would be negatively correlated to motivators and positively correlated to barriers, as parents may feel like they have less capacity to seek mental health services when they are already overwhelmed with other stressful events. I also anticipated that family resources would be positively correlated to motivators and negatively correlated to barriers, as a lack of family resources could be seen as a barrier to accessing services (e.g., parents feeling like they have limited capacity and time to search for sufficient services). Lastly, I hypothesized that perceived social support would be positively correlated to motivators and negatively correlated to barriers, as social support has been shown to positively impact immigrant individuals' mental health (Kingsley, 2020; Alegría et al., 2017; Szaflarski & Bauldry, 2019).

For research question four, based on the overall literature detailing immigrant individuals' challenges with mental health, acculturation, and seeking services, I expected that immigrant parents would report more stressful experiences, fewer family resources, less perceived social support, more barriers, and fewer motivators than Canadian-born parents (Salami et al., 2019; Thomson et al., 2015; Kalich et al., 2016).

Method

Participants

The present study was part of a larger project aimed at investigating Canadian parents' preferences for online mental health and parenting resources. Participants were recruited using crowdsourcing strategies through AskingCanadians, which is an online research community where Canadians can sign up to participate in completing surveys. In order to participate, parents

must have resided in Canada, been at least 18 years old, identified as a caregiver to a 0 to 5-year-old child, been comfortable understanding, reading, and writing in English, have access to an electronic device with internet capabilities (e.g., phone, tablet, or computer), and must have been born outside of Canada. Thus, participants who do not meet these criteria will not be eligible to participate in this research. After approval from the Research Ethics Board at the University of Manitoba (HE2023-0124), data were collected from June to July 2023.

Originally, a sample size of 90 immigrant parents was anticipated through the range of participants currently available through the AskingCanadians portal. After consultation with their team on my eligibility criteria, they stated that this sample size was what could be expected based on an estimation of the percentage of individuals on the AskingCanadians portal who meet the inclusion criteria for this research. Out of the 606 parents recruited for the larger study, 152 immigrant parents and 449 Canadian-born parents were recruited. Of the immigrant parents, most were living in Ontario (n = 87). Participants ranged in age from 22 to 61 years old, with the average age being 36 years old (M = 36.41, SD = 5.763). Most participants identified as women (n = 103). Most participants identified as South Asian (n = 53), East Asian (n = 21), and Black African (n = 16). Most participants had moved to Canada less than 5 years ago (n = 71). Further sociodemographic information can be found in Appendix B.

Measures and Materials

Participants completed an online survey with the following measures listed below (see Appendix D for measures that were created for this study), which are described in the order they appeared to participants. Available reliability and validity data for each measure is summarized.

Sociodemographic Questions

Sociodemographic questions were asked at the start of the survey, including items about one's age, gender identity, ethnic background, country of birth, language(s) spoken, education, marital status, and income. Most of these questions were multiple choice, with an option to type in a response where applicable (for example, if one's gender identity is not listed, they are asked to specify in a text box). Multiple choice responses for questions regarding language(s) spoken were pulled from the Canadian census (Statistics Canada, 2021), with an open-ended response option for languages not captured in the question. Participants were also asked questions about their children, such as their relation to the child, child age, how often the child resides in their house, and childcare arrangements.

Family Resource Scale – Revised (FRS-R)

This measure contained 29 items and explored whether a family has adequate resources to support the needs of the whole family and individuals' specific needs within the family. For example, "To what extent are the following resources adequate for your family? Food for 2 meals a day." Participants rated each item on a 5-point scale, from "Not at all adequate" to "Almost always adequate," with an option to deem an item not applicable to their family. Higher scores indicated greater endorsement of feeling like one's family has adequate resources. A global score was created by summing the response to all items. Subscales included basic needs, money, time for self, and time for family, with subscale scores created by averaging responses. Reliability and validity for this measure were supported by previous research (Van Horn et al., 2001), with reliabilities for the four subscales ranging from $\alpha = .72$ to $\alpha = .84$. Previous research has used this scale with some ethnic minorities (Van Horn et al., 2001), but mostly with mothers.

Parent Preferences Questionnaire

This measure evaluated participants' preferences for what they want to see in an online family mental health resource. Questions were about preferences for content delivery (e.g., accessing resources through a web-based portal and teletherapy through an online videoconferencing platform), program length, content (e.g., expert-developed and peer-developed content, online forums, peer coaching, counselling, and support groups), program structure (e.g., self-directed, structured by facilitators, or a mix of the two), facilitator preferences (e.g., if one would prefer peers, community coaches, or professionals such as psychologists or social workers), and preferences for another parent/co-caregiver to be involved alongside the participant in a program. Participants were also asked to rank how important it would be to have fellow parents and facilitators share an identity with them in different domains (e.g., age, gender, religion, culture, etc.). Questions about previous usage of online mental health resources were asked (e.g., "Have you used any of the following online mental health or parenting resources?"). Lastly, participants were asked about potential barriers to engaging in an online mental health or parenting program (response items including more general items about things like Wi-Fi capabilities, technology literacy, lack of time, and lack of childcare). Multiple choice, open-ended, and scale questions were asked. 5-point Likert scales were used, as well as scales numbered from zero to 100. This measure was developed for this research.

Barriers and Facilitators Questionnaire

This measure was created for this study and investigated the specific barriers and motivators that parents foresaw facilitating or restricting their participation in mental health or parenting programs. For example, "What are some factors that motivate you to access family mental health resources? (Check all that apply)." Response items included things like, "I want to

improve my mental health." Some questions were developed to be answered specifically by immigrant parents, such as, "What are some contextual and culturally-important factors that motivate you to access family mental health resources?" Response items were developed from the researchers' own experiences, as well as informed by the literature (Thomson et al., 2015; Salami et al., 2019; Kingsley, 2020; Emerson et al., 2022; Szaflarski & Bauldry, 2019; Alegría et al., 2017). For example, "There are programs offered in the language I am most comfortable speaking in." Most questions were multiple choice, with some open-ended, and one a 5-point Likert scale.

Recent Stressful Experiences (RSE) Questionnaire

This measure asked questions about levels of support and stressors that have occurred in the participant's life during the past five years. For example, "In the past 5 years, have you had any serious problems or difficulties in your relationship with your child(ren)?" Participants answered questions as yes or no, on 5-point Likert scales, and multiple choice. There are two subscales: one looking at the number of stressful experiences occurring, and one looking at hopefulness and coping with the stressful experiences. Thus, higher scores for some items endorsed a greater number of stressful experiences, and for other items endorsed a greater amount of resilience and social support. Scores were created by averaging responses. This measure was developed based on recommendations from the Harvard's Center on the Developing Child, as a part of the JBP research network on toxic stress (Cameron et al., 2020). The original measure asked about events in the past month and past year, but for the purposes of this research this was changed to "past 5 years." This measure is still relatively new, and so reliability and validity have not yet been examined.

Multidimensional Scale of Perceived Social Support (MSPSS)

This 12-item measure evaluated the level of social support one perceived to receive from others (Zimet et al., 1988). Participants were asked to rate statements on a 7-point scale, with 1 being "Very strongly disagree" and 7 being "Very strongly agree." For example, "There is a special person who is around when I am in need." Higher scores inferred higher endorsement of perceived social support. A global score of perceived level of support and the scores for the three subscales (looking at friends, family, and significant others) can be created by summing responses. Previous research supports internal (α = .88) and test-retest (α = .85) reliability, as well as construct validity (Zimet et al., 1988).

Procedure

Participants were recruited using AskingCanadians (www.askingcanadians.com) through crowdsourcing. AskingCanadians is an online research community where Canadians can sign up to participate in completing surveys on different topics. Through AskingCanadians, potential participants who met eligibility criteria were presented with this study through the online platform. Participants were deemed eligible through their profiles or by a brief eligibility screener that was created to ensure they met inclusion criteria. Participants could then click a link to be redirected to the consent form (see Appendix C) on the University of Manitoba's secure REDCap server. If participants consented, they could complete the online survey with the aforementioned measures, which should have taken around 25-30 minutes to complete. Once the survey was complete, they received compensation in the form of $9.00 CAD in loyalty program points, distributed through Canadian loyalty programs such as AskingCanadians points, Hudson's Bay Rewards, Aeroplan, Petro-Points, and Via Préférence. Participants who declined

to participate or wished to stop participating could close the browser at any time without penalty. Participants could ask to receive an aggregated summary of results of the study once completed.

Participants who responded that they had been born outside of Canada on the survey will be shown specific questions through branching logic that Canadian-born participants will not see (see Appendix D). This was done to try and capture their unique experiences as an immigrant parent.

Data Analyses

Data analyses were conducted in SPSS (IBM Corp., 2023). Assumptions were checked for each analysis. Frequencies were used to analyze which motivators, barriers, and preferences participants endorsed the most for research questions one and two. For research question three, relationships between reported motivators and barriers with recent stressful experiences, family resources, and perceived social support were examined using Pearson's correlations. Simple linear regression analyses were also run for significantly correlated variables. To further investigate relationships discovered during the regression analyses, mediation and moderation analyses were run. For research question four, independent samples *t*-tests were run to determine differences between reported motivators, barriers, recent stressful experiences, family resources, and perceived social support between immigrant and Canadian-born parent samples.

Results

RQ 1 & 2: What Are the Motivators, Barriers, and Preferences of Immigrant Parents?

After running frequency analyses for research question one, it was determined that the three highest endorsed motivators for accessing mental health services by immigrant parents are as follows: wanting to learn more ways to be a good parent to their children (40.80%), wanting to improve their own mental health (31.30%), and thinking that mental health service providers

would understand and be considerate of them and their culture (27.90%). On the contrary, the three highest endorsed barriers are as follows: worry about being unable to afford the financial cost of services (28.60%), feeling more comfortable using services if there were language translators/interpreters (22.40%), and feeling more comfortable using services if they were offered in multiple languages (21.20%). For additional information on reported motivators and barriers, please see Appendix B.

Additional frequency analyses for research question two revealed preferences for an online mental health resource. The four highest endorsed features were as follows: wanting to access the resource through a web-based portal on a computer or laptop (42.90%), having a psychologist as their first choice for who to receive coaching from in an online program (39.30%), wanting content like readings and videos to be developed by experts such as doctors, psychologists, or social workers (39.0%), and being enrolled in an online program for either 2-4 weeks (26.80%) or 1-2 months (26.80%). For additional information on reported preferences for an online resource, please see Appendix B.

RQ 3: What are the Relationships Between Stressful Experiences, Family Resources, Social Support, and Motivators/Barriers Reported by Immigrant Parents?

As discussed previously, “motivators” and “barriers” were listed separately from “cultural barriers” and “cultural motivators” in the survey, in which the cultural items listed motivators and barriers that would be more likely for immigrant Canadian parents. Participants who were born in Canada would not have seen the questions regarding cultural barriers and cultural motivators in the survey. All four of these variables were significantly correlated with stressful experiences and three of them were significantly correlated with perceived social

support (except for cultural motivators). However, none of them were correlated with family resources. For more complete findings of the correlations, please see Appendix B.

In particular, recent stressful experiences was significantly and positively correlated with all four variables: barriers, $r(145) = .39$, $p < .001$, cultural barriers, $r(145) = .32$, $p < .001$, motivators, $r(145) = .48$, $p < .001$, and cultural motivators, $r(145) = .39$, $p < .001$. These correlations were all moderate in strength. In addition, perceived social support was significantly and negatively correlated with three variables: barriers, $r(121) = -.23$, $p = .01$, cultural barriers, $r(121) = -.19$, $p = .01$, and motivators, $r(121) = -.18$, $p = .01$.

In order to further explore the relationships between stressful experiences, social support, and motivators/barriers, simple linear regression analyses were run. Overall, all four regressions were significant, in which stressful experiences and social support accounted for anywhere from 7.50% to 12.40% of the variance of reported motivators and barriers. Additionally, motivators were correlated with parent education level, and barriers, cultural motivators, and cultural barriers were correlated with the reported number of children the participant had. Thus, those variables were controlled for in running these regression analyses.

Table 1

Simple Linear Regression Analyses

Variable	***F*(3,119)**	***p***	**R^2**	**Percentage of variance explained by stressful experiences and social support (%)**
Motivators	5.62	.001	.12	12.4
Barriers	4.31	.006	.10	9.8
Cultural Motivators	3.20	.026	.08	7.5
Cultural Barriers	3.90	.011	.09	8.9

Note. Regression analyses run between reported recent stressful experiences, perceived social support, motivators, and barriers.

RQ 4: What are the Differences Between Stressful Experiences, Family Resources, Social Support, and Motivators/Barriers Reported by Immigrant and Canadian-Born Parents?

In exploring the differences between the immigrant and Canadian-born parent samples, independent samples *t*-tests were run. It was found that there was a significant difference between the immigrant parent sample (M = 1.33, SD = 1.37) and the Canadian-born parent sample (M = 1.67, SD = 1.67) in RSE scores, in which the mean score for immigrant parents was .34 lower in reported stressful experiences ($t_{297.480}$ = -2.44, p = .015). There was also a significant difference in reported family resources between immigrant parents (M = 72.88, SD = 16.59) and Canadian-born parents (M = 76.19, SD = 15.18), in which the mean score for immigrant parents was 3.3 lower in the number of reported family resources. Lastly, there was a significant difference in reported motivators between immigrant parents (M = 1.22, SD = 1.09) and Canadian-born parents (M = 1.65, SD = 1.24), in which the mean score for immigrant parents was .43 lower in the number of reported motivators.

There were no significant differences between immigrant parents (M = 64.55, SD = 13.33) and Canadian-born parents (M = 63.25, SD = 14.66) in terms of perceived social support (t_{499} = .872, p = .384). There was also no significant difference in the number of reported barriers (t_{588} = -1.56, p = .121) between the immigrant parent sample (M = 1.08, SD = 1.15) and the Canadian-born parent sample (M = 1.25, SD = 1.14).

Follow-Up Exploratory Analyses

Comparing Descriptives and Means Amongst the Immigrant Parent Sample

In acknowledging the incredible diversity amongst and between immigrant groups, the sample was split into the following seven groups based on where participants said they were raised: Africa, Asia, Europe, North America, Oceania, South America, and Multiple. It would

have been preferred to create groups based off of countries (as each continent spans a wide range of countries, cultures, and groups), but in the interest of creating a more concise number of groups, participants were split into groups based on the continent(s) they were raised in.

Based on the results, it was clear that the majority participants were raised in Asia (54.61%), with the next greatest majorities being in North America (14.15%) and Africa (11.35%). Of note, the highest RSE scores were reported in the Asia, Africa, and Multiple (i.e., those that were raised across multiple continents) groups. The highest MSPSS scores were reported in the Asia, South America, and North America groups. The lowest MSPSS scores were reported in the Asia and Africa groups. The lowest FRS-R scores were reported in the Asia and North America groups. The highest score for number of barriers was reported in the Europe group. The highest score for number of barriers was reported in the Asia group. These findings simply represent which groups the minimum and maximum scores were found for each measure and cannot tell us whether differences between groups were significant. However, it is interesting to consider for future research with greater sample sizes across groups where the differences are between these groups and why they might occur.

Moderation Analyses for the Immigrant Parent Sample

Given the significant regression results, follow-up mediation and moderation analyses using the PROCESS macro in SPSS (Hayes, 2012) were run to further explore the relationships between stressful experiences, social support, motivators, and barriers. No significant mediations were found, but three significant moderation results were uncovered. Please see Appendix B for figures of the moderation analyses.

Firstly, a moderation analysis was run with stressful experiences as a predictor, cultural barriers as the outcome, parent age as a potential moderator, and child number added as a

covariate. The overall model was significant ($F(4, 142) = 7.56$, $p < .001$, $R^2 = .1756$), in which 17.56% of the variance was due to stressful experiences, age, and their interaction. It was also found that the interaction between stressful experiences and age was significant ($b = -.01$, $SE = .01$, $t(142) = -2.21$, $p = .029$), demonstrating that age acted as a moderator for the relationship between stressful experiences and cultural barriers. Furthermore, stressful experiences significantly predicted the number of cultural barriers at lower levels of age in this participant sample at 31 years old ($b = .27$, $SE = .06$, $t(142) = 4.59$, $p < .001$), at the average age of 36 years old ($b = .20$, $SE = .04$, $t(142) = 4.54$, $p < .001$), and at higher levels of age at 42 years old ($b = .11$, $SE = .04$, $t(142) = 2.00$, $p = .047$). Thus, parent age moderated the association between stressful experiences and cultural barriers such that for parents who were younger and for those who were of average age for this sample, the more stressful experiences they reported, the more cultural barriers they reported. This was also true for older parents (42 years old), although the effect wasn't as strong.

A second moderation analysis was run with perceived social support as a predictor, barriers as the outcome, parent age as a potential moderator, and child number added as a covariate. The overall model was significant ($F(4, 118) = 5.75$, $p < .001$, $R^2 = .1632$), in which 16.32% of the variance was due to social support, age, and their interaction. It was also found that the interaction between social support and age was significant ($b = .01$, $SE = .001$, $t(118) = 3.70$, $p < .001$), demonstrating that age acted as a moderator for the relationship between social support and barriers. Furthermore, social support significantly predicted the number of barriers at lower levels of age in this participant sample at 31 years old ($b = -.05$, $SE = .01$, $t(142) = -4.63$, $p < .001$) and at the average age of 36 years old ($b = -.02$, $SE = .007$, $t(142) = -2.87$, $p = .005$). However, this relationship was not significant at higher levels of age at 41 years old ($b = .01$, SE

= .01, $t(142) = .61$, $p = .543$). Thus, parent age moderated the association between social support and barriers such that for parents who were younger, the less social support they reported, the more barriers they reported and vice versa. This was also true for parents of average age for this sample, although it wasn't as strong. And this relationship was not significant for older parents in this sample.

Lastly, a moderation analysis was run with perceived social support as a predictor, barriers as the outcome, parent gender as a potential moderator, and child number added as a covariate. The overall model was significant ($F(4, 118) = 4.63$, $p = .002$, $R^2 = .1357$), in which 13.57% of the variance was due to social support, gender, and their interaction. It was also found that the interaction between social support and gender was significant ($b = -.06$, $SE = .02$, $t(118) = -3.03$, $p = .003$), demonstrating that gender additionally acted as a moderator for the relationship between social support and barriers. Furthermore, social support significantly predicted the number of barriers for participants who identified as women ($b = -.03$, $SE = .01$, $t(118) = -3.76$, $p < .001$), but not for participants who identified as men ($b = .03$, $SE = .02$, $t(118) = 1.60$, $p = .112$). Thus, parent gender moderated the association between social support and barriers such that for parents who identified as women, the less social support they reported, the more barriers they reported and vice versa. This relationship was not found for those who identified as men.

Additional T-Tests Between the Immigrant and Canadian-Born Samples

In wanting to investigate the difference in stressful experiences between the immigrant parent and Canadian-born parent samples, more *t*-tests were run for the hopefulness and coping subscale and the social support score from the RSE (there is one item on this measure that looks at social support). There were no significant differences between immigrant parents ($M = 14.99$,

SD = 3.30) and Canadian-born parents (*M* = 14.89, *SD* = 3.15) regarding hopefulness and coping scores on this measure (t_{498} = .32, *p* = .751). Similarly, there were no significant differences between immigrant parents (*M* = .72, *SD* = .45) and Canadian-born parents (*M* = .77, *SD* = .42) regarding the social support score ($t_{187.568}$ = -1.06, *p* = .292).

Discussion

Reported Motivators and Barriers

Several of my hypotheses were supported by the findings of the present study, and several were not. For RQ1, my hypothesis that the most frequently endorsed motivator would be wanting to improve one's own mental health was incorrect. The most frequently endorsed motivator was wanting to learn more ways to be a good parent to one's children (39.50%) – however, the previous item was still the second most frequently endorsed (30.30%). Generally, these two motivators align with literature that discusses how immigrant individuals need and want support with their mental health despite underutilizing services due to accessibility, discrimination, financial, and acculturative challenges (Salami et al., 2019). Additionally, the third highest endorsed item was unexpected – a cultural motivator in which participants felt like mental health service providers would be considerate and understanding of themselves and their culture (27.00%). This was not aligned with previous literature, which cited that some immigrant individuals felt distrust towards service providers and feared discrimination from service providers (Donnelly et al., 2011). Although it cannot be confirmed with the present study's findings, it seems possible that some immigrant individuals have had more positive experiences with service providers in recent years, which does not seem to have been studied yet. There have been greater efforts to incorporate cultural sensitivity into programs in recent years after all (e.g., The Crying Clinic; Bohr et al., 2021).

The highest endorsed barrier was concern that one could not afford the financial cost of mental health services (27.60%). This did not support my hypothesis that the most frequently endorsed barriers would be related to acculturation stressors and distrust with service providers. However, this does align with research that cite unemployment and financial strain as a significant barrier to service access (Urindwanayo, 2018; Guruge et al., 2015; Delara, 2016; Thomson et al., 2015; George et al., 2015; Salami et al., 2019; Kalich et al., 2016). The next highest two endorsed barriers did support my hypothesis regarding acculturation stressors, as the items both had to do with desiring supports offered with the support of interpreters/translators (21.70%) and offered in multiple languages (20.40%). This also aligns with literature citing language barriers as a factor that prevents immigrants from accessing supports (Kalich et al., 2016; Thomson et al., 2015; Salami et al., 2019). Based on these findings, it seems apparent that systemic challenges continue to hinder immigrant individuals from more successfully accessing beneficial services.

Immigrant Parent Preferences for an Online Resource

Overall, immigrant parents preferred a shorter program (2-4 weeks or 1-2 months; 18.70%) that could be accessed via the web on a computer (41.40%) that was led by a psychologist (30.30%) and contained content developed by experts (27.00%). These results mostly supported my hypothesis that parents would want a shorter program developed and led by an expert. However, this did not support my hypothesis that immigrant parents would prefer to access an online resource via a phone application. It is possible that immigrant parents might prefer to access supports via a computer so that it is easier to read and/or use, but there is a lack of research investigating these specific preferences, so it cannot be confirmed for sure.

An interesting finding to note is that parents seemed to prefer certain experts – psychologists (30.30%) and medical doctors (18.40%) – over having peers (12.50%) lead or coach in an online parenting program. This is interesting, as it might speak to a desire for ensuring that the content/program of the program was developed by experts in the mental health field, despite the literature citing some distrust with service providers (Donnelly et al., 2011). There may be a nuance in which some individuals trust the knowledge acquired by experts but may be less trusting when it comes to being vulnerable with a mental health service provider (e.g., in therapy). However, this cannot be confirmed just based on the findings of the present study. Additionally, parents seemed to want social workers (6.60%) to lead programs the least. This is interesting, as we list social workers as a part of the group of experts who could develop and lead online programs. This could speak to previous negative experiences with social workers, but further research would be required.

Relations Between Stressful Experiences and Social Support with Motivators and Barriers

The correlations ran between all major variables both supported and disproved my hypotheses. Motivators, barriers, cultural motivators, and cultural barriers were not significantly correlated with family resources. This is contrary to how socioeconomic status and factors such as employment and financial strain were cited as significant barriers to service access in other research (Urindwanayo, 2018; Guruge et al., 2015; Delara, 2016; Thomson et al., 2015; George et al., 2015; Salami et al., 2019; Kalich et al., 2016). However, all four motivators and barriers variables were significantly and positively correlated with recent stressful experiences, which partially supported my hypothesis that motivators would be negatively correlated, and barriers would be positively correlated, to RSE scores. This is partially aligned with research that cites how immigration-related stressors (e.g., language barriers, unemployment, social isolation) can

create barriers to service access (Kalich et al., 2016; Thomson et al., 2015; Salami et al., 2019; Urindwanayo, 2018; Guruge et al., 2015; Delara, 2016; George et al., 2015). Additionally, motivators, barriers, and cultural barriers were significantly and negatively correlated with perceived social support. This is also partially aligned with research that cites how social support and a sense of community are important factor in supporting immigrant mental health (Kingsley, 2020; Alegría et al., 2017; Szaflarski & Bauldry, 2019). For example, a lack of social support could lead to poorer mental health and an increase in reasons to want to seek support. Again, future research investigating causality would be necessary to confirm this.

I additionally expected that motivators and barriers would trend in opposite directions, but it would also make sense that parents might be aware of and increase/decrease both simultaneously. For example, it might be that immigrant parents who experienced many stressful events could reflect on how those events created additional stressors/barriers for them, but also gave them more reasons to want to seek support (i.e., motivators). Whether this is true, however, would have to be confirmed with further research.

Through moderation analyses, it was found that parent age acts as a moderator for the relationships between stressful experiences and cultural barriers, as well as social support and barriers. It would make sense that parent age may act as a moderator, given that both stressors and supports can be accumulated through different life events and as time passes by. However, this is not studied much in the literature and cannot be confirmed by the present study. Some research has found that some parents who are younger more frequently engage in accessing supports, but this was found within Australian and United States parent samples, and not an immigrant parent sample (Baker et al., 2017; Kothari et al., 2020). It also does not quite speak to motivators and barriers for service access. It was also found that parent gender acted as a

moderator for the relationship between social support and barriers, particularly when the individual identified as a woman. Some research about social support and immigrant individuals alludes to the idea that gender and gender roles could have some relationship with mental health symptoms and social support for immigrant individuals (Alegría et al., 2017). Generally, it made sense that parent age acted as a moderator, given that both stressors and supports can be accumulated through life events and time, but it would require future research exploring the links between parent age, social support, and service access barriers to confirm. Although, some research has already found that parents who are younger more frequently engage in accessing supports in Australia and the United States, for example, but those studies were in a bit of a different context (Baker et al., 2017; Kothari et al., 2020).

Differences Between the Immigrant Parent and Canadian-Born Parent Samples

I had hypothesized that immigrant parents would report more stressful experiences and barriers, and fewer family resources, social support, and motivators than Canadian-born parents. The findings partially supported this hypothesis, in which immigrant parents reported fewer stressful experiences, family resources, and motivators. Unexpectedly, immigrant parents reported fewer stressful experiences – which was surprising as research has shown that the process of moving to a new country comes with a fair set of challenges (Kalich et al., 2016; Thomson et al., 2015). The reasons as to why these differences exist cannot be established through the analyses run in the present study, but one potential reason could be that the RSE measure is not specific to the immigrant experience.

Generalizability of Findings

A larger immigrant parent sample was recruited than expected but given the extensive diversity amongst immigrants across all of Canada, it is unlikely that these findings are

generalizable to this group as a whole. Further research with greater sample sizes and larger subgroups of immigrant parents across continents and countries would be required, especially given the fact that the present study's sample was mostly comprised of immigrants from Asia. Additionally, one might be hard pressed to say that researchers could ever establish findings that are generalizable to all Canadian immigrant parents because each group, family, and individual's experience is unique and different. However, a better goal may be to collect immigrant parent preferences and create better programs that are more helpful to a broader range of immigrant parent experiences. Other factors that might make this research more generalizable in future studies are discussed below.

Strengths and Limitations

One strength of this research was the larger sample size for both the immigrant parent and Canadian-born parent samples, allowing the findings to be more generalizable to the overall parent populations in Canada as compared to if I had recruited a smaller sample size. Additionally, the present study collected a large amount of data about the different events and preferences of Canadian parents, allowing for the analysis of the many different aspects of their experiences. This will also allow for future analyses and research with this data (e.g., some qualitative data was collected, but was not analyzed as it was beyond the scope of this research; it is possible that it may also reveal some interesting themes about the immigrant parent experience with accessing services in Canada). Lastly, the present study demonstrates findings in an under-researched area and with an under-represented population. Thus, it brings attention to a population of parents that urgently need more inclusive and accessible mental health services.

There are also some limitations to this research that must be taken into consideration. The survey presented to participants was quite long and asked many questions, meaning that some

participants may have gotten tired throughout, putting less reflection into answers at the end than those at the beginning. Additionally, most of the measures were closed-ended questions (e.g., multiple choice). Although participants were also given the option to type into a text box for most questions, seeing other response options already presented on the screen may have discouraged open-ended responses (i.e., it is easy to click a response than to type one out). Additionally, the motivators and barriers measures were created for the purposes of this research, and limited to what I created and could find in the literature. Thus, these measures could have been biased, leading participants to think a certain way, and potentially missing participant responses that I would have not thought of or are not represented in the literature. Additionally, no reliability and validity data could be provided for these measures as I had created them for the present study. One could also argue that I should have used measures that more extensively measured immigration-related stressors, as a core aspect of the immigrant parent experience. For example, the RSE measure is more general, and may be missing stressful experiences that most immigrant individuals face in the process of moving countries. Additionally, it may have been beneficial to have included a more detailed measure on trust in the healthcare system and service providers, as that is prominent in the literature and likely related to motivators and barriers for accessing services.

Differentiating between immigrant parent groups may also have been more beneficial than studying them as a whole. Additionally, I could have asked more questions about participants' immigration experience. For example, it is likely that someone who immigrated for work versus someone who fled their country as a refugee would have drastically different experiences and mental health needs. Additionally, someone who is a permanent resident/citizen could face different structural barriers and have different program preferences than someone who

immigrated with a temporary residence permit. It would have also been interesting to know what programs participants used to immigrate to Canada, and whether any additional supports for mental health services were ever mentioned in the process. These items serve as limitations for the conclusions I can draw about what informed immigrant participants' experiences.

Future Research and Implications

Future research should address the limitations of the present study, and more extensively investigate the immigrant parent experience, their preferences for mental health and parenting resources, and the motivators/barriers they have for accessing supports. For example, it would be interesting and important to know why immigrant parents have certain preferences, as this would be crucial information for how to adapt programming and make it more inclusive. For example, do immigrant parents prefer shorter programs because they feel too busy or overwhelmed to accommodate a longer program? What other major tasks are they accommodating throughout the day? How are these experiences different from Canadian-born parents experiences? It is also recommended that future research investigate the context of immigrant parents' reported motivators and barriers. For example, what reasons do they have for wanting to improve their parenting skills and better their mental health? What roles do stigma and discrimination play in their decisions to seek services? It would also be beneficial for future research to highlight the experiences and mental health needs of refugee parents and families as well, as it is likely they will differ from other immigrant families.

Additionally, investigating immigrant parents' experiences with in-person and online supports thus far would also be crucial. In order to learn how to create more accessible programming, it would be helpful to know what their previous experiences were, and what was beneficial or harmful about other resources. Future research should also explore preferences for

in-person supports. Online supports can be helpful in addressing some accessibility concerns, but there will likely be individuals who also prefer in-person services regardless.

Given the relationship found between stressful experiences, social support, and motivators/barriers within the present study, it could be worth investigating in future research how the former two variables might serve as possible avenues for reducing barriers and increasing motivators for immigrant parents. It may also be worth exploring whether a different measure of family resources (perhaps one that has been more extensively used with immigrant populations) might be correlated with motivators and barriers.

A promising potential outcome of addressing service access barriers is turning them into motivators. For example, making mental health services more widely available in different languages or utilizing interpretation services can make language a facilitator for why these parents may access services. Parents who are uncomfortable speaking in English or feel more confident speaking in a different language would have more options for inclusive mental health services. They may also feel more supported by the mental health service. In addition, it is apparent that a huge motivator for using mental health services could be social support. Given that there seem to be associations between social support and social resilience with more positive mental health outcomes for immigrant individuals (Kingsley, 2020; Alegría et al., 2017; Szaflarski & Bauldry, 2019), it may be worth exploring further whether social support could encourage individuals to access mental health resources. Social support likely reduces one's concerns regarding discrimination and stigma around mental illness and creates a network of individuals who can provide assistance during times of need. For example, some research has shown that immigrant individuals who live in areas with bigger immigrant populations also have fewer mental health challenges (Emerson et al., 2022).

Knowledge Exchange

An important future consideration for the present study is how to translate this work into findings that are easily understandable when disseminated to community members, knowledge users, service providers, and other researchers. In order to continually improve this type of research and to hear valuable opinions from persons with lived experience (with immigration, parenting, and managing mental health needs), it is crucial to consider how to present this work to community organizations. For example, the Specialized Services for Children and Youth (SSCY) Centre or New Directions are both organizations that support families with mental health needs and have clients who are immigrant parents. It would likely be worth reaching out to disseminate this study's findings through presentations or infographics.

Conclusion

The present study demonstrated various findings regarding what motivates and prevents immigrant parents from accessing mental health and parenting services in Canada. It also explored immigrant parents' preferences for an online mental health resource. Additionally, I looked at the relationships between stressful experiences, family resources, perceived social support, motivators, and barriers for immigrant parents. Lastly, I examined the differences amongst all of these variables between an immigrant parent and Canadian-born parent sample. Through these investigations, it was demonstrated that immigrant parents have motivations for accessing services (e.g., wanting to improve their parenting skills), but that there are significant barriers preventing them from doing so (e.g., financial cost, language barriers). It was additionally established that immigrant parents have preferences for an online resource that is shorter in duration, accessed online via the web, and developed and led by a psychologist. Lastly, it was shown that there are relationships between social support, barriers, stressful experiences,

family resources, and motivators, in this sample, and that immigrant parents tend to report fewer of the latter three. Thus, this research demonstrated the importance of making programs more accessible and culturally sensitive, including community members' voices into program and intervention development, and also in tackling any challenges to service access from a more informed perspective. This study also provided a crucial first step toward creating and adapting resources for parent populations who have greater difficulty in accessing mental health care but are in critical need of it.

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Appendices

APPENDIX A

Lay Statement

Newcomer and immigrant parents face stressors related to both immigration and parenting. However, it is unclear what prevents and motivates them to use mental health and parenting resources. In my study, I will use a survey to learn what these parents think prevent and help them access mental health and parenting resources. I will also ask them what things they want included in a resource like this so that they would actually want to use it. By examining their responses to a survey I created, I was able to learn that immigrant parents are motivated to use mental health services to improve their parenting skills. However, they are worried that services will be too expensive. I also learned that there are relationships between the number of stressful experiences they recently encountered, how many family resources they have, how much social support they feel they have, and what prevents and motivates them to use services. Lastly, I learned that immigrant parents feel that they have fewer stressful experiences, family resources, and motivators than Canadian-born parents. These findings are important for us to know so that we can make current mental health and parenting resources better, and to create supports in the future that are more suited to addressing immigrant parents' needs.

APPENDIX B

Supplemental Tables and Figures

Table 2

Summary of Research Questions, Hypotheses, and Analyses

Research Question	Hypothesis	Analyses Conducted
1. What motivators and barriers are commonly reported by immigrant parents when accessing mental health and parenting supports in Canada?	• Most frequently endorsed motivator would be wanting to improve one's own mental health. • Most frequently endorsed barrier would relate to acculturation stressors and distrust in Canadian service providers.	• Frequencies and descriptives for sociodemographics (including place of birth, place raised, current residence, age, gender identity, ethnic background, how long since moving to Canada). • Frequencies for each item in the Barriers and Facilitators Questionnaire related to motivators and barriers (questions 1-4).
2. What features would immigrant parents want included in an online resource?	• Immigrant parents would prefer to access an online resource via a phone application. • Immigrant parents would want a shorter online program. • Immigrant parents would want an expert (doctor, psychologist, social worker) to develop and led an online program.	• Frequencies for each item in the Parent Preferences Questionnaire.

Note. Continued on next page.

Table 2 Continued

3. What are the relationships between stressful experiences, family resources, social support, and motivators/barriers reported by immigrant parents?	• Stressful experiences would be negatively correlated to motivators and positively correlated to barriers. • Family resources would be positively correlated to motivators and negatively correlated to barriers. • Perceived social support would be positively correlated to motivators and negatively correlated to barriers.	• Pearson's correlations run between sociodemographics, scores from the RSE, FRS-R, MSPSS, and questions 1-4 from the Barriers and Facilitators Questionnaire. • Linear regression analyses run for the same variables listed above. • (Exploratory) Mediation and moderation analyses run for the same variables listed above.
4. What are the differences in stressful experiences, family resources, social support, and motivators/barriers between immigrant and Canadian-born parents?	• Immigrant parents would report more stressful experiences, fewer family resources, less perceived social support, more barriers, and fewer motivators than Canadian-born parents.	• Independent samples t-tests run between scores from the RSE, FRS-R, MSPSS, and questions 1-4 from the Barriers and Facilitators Questionnaire.

Note. The above table summarizes the research questions, hypotheses, and analyses used within this research.

Table 3

Sociodemographic Frequencies of Immigrant Parent Sample

Variable	Percentage of Sample (%)
Residence	
Alberta	12.50
British Columbia	10.50
Manitoba	4.60
New Brunswick	1.30
Newfoundland and Labrador	2.00
Nova Scotia	1.30
Ontario	57.20
Prince Edward Island	.70
Québec	5.30
Saskatchewan	4.60
Gender Identity	32.20
Woman	67.80
Man	
Sexual Orientation	
Heterosexual	89.50
Ethnicity	
Black African	10.50
Black Canadian or African American	1.30
Black Caribbean	3.30
East Asian	13.80
Indo-Caribbean	.70
Latin American	7.90
Middle Eastern	3.90
South Asian	34.90
Southeast Asian	10.50
White Canadian or White American	3.30
White European	4.60
Multiple Identities	3.90
Did not identify with any listed identity	1.30
Cantonese	

Note. Continued on next page. $N = 152$.

Table 3 Continued

Variable	Percentage of Sample (%)
Language Spoken Most Often at Home	
English	63.20
French	2.00
Mandarin	2.00
Punjabi	4.60
Cantonese	6.60
Spanish	3.90
Arabic	1.30
Tagalog	.70
Urdu	3.90
Russian	1.30
Not listed	10.50
Marital Status	
Single, never married	7.20
Married or common-law/domestic partnership	89.50
Widowed	.70
Divorced	1.30
Separated	1.30
Parent's Highest Level of Education	
High school diploma	5.90
Diploma from trade/technical/vocational training	5.30
Diploma from a CEGEP	3.90
Associate degree or undergraduate certificate from a university/college	7.20
Bachelor's degree	46.10
Master's degree	25.70
Professional degree (e.g., MD, JD, DDS)	4.60
Not listed	.70
Employment	
Working full-time	51.30
Working part-time	13.20
Unemployed	5.90
On leave	3.30
Full-time student	1.30
Homemaker or stay-at-home parent	15.80
Various states of employment	8.60
Number of children	
1	56.60
2	36.80
3	3.90
4	2.60

Note. $N = 152$.

Table 4

Frequency of Motivators Reported for Accessing Services

Motivator	Frequency Endorsed (%)
I want to improve my mental health.	30.30
I want to learn more ways to be a good parent to my child(ren).	39.50
I can easily access information about the mental health and parenting resources available to me.	23.70
My family and/or friends support my use of mental health services and parenting resources.	10.50
I want to access family mental health resources that have both in-person and online/remote options for service.	13.80
Culturally-Important Motivators	
There are programs offered in the language I am most comfortable speaking in.	21.70
There are interpreters available to help me use family mental health resources.	12.50
I think mental health service providers will understand and be considerate of me and my culture.	27.00
I think that available family mental health resources will take my culture into consideration.	15.80
I trust that Canadian family mental health resources can help me and my family.	20.40

Note. $N = 152$.

Table 5

Frequency of Barriers Reported for Accessing Services

Barrier	Frequency Endorsed (%)
I am worried about what others will think if I use mental health services and parenting resources.	14.50
I am worried what others will think if I am diagnosed with a mental illness.	14.50
I think that my friends and/or family will judge me for accessing mental health services and parenting resources.	5.30
I do not think I will be able to afford the financial cost of accessing mental health services and parenting resources.	27.60
I do not know where to find information about the mental health services and parenting resources available to me.	13.20
I do not think mental health service providers will understand or be sensitive to my culture.	7.90
I am scared that mental health service providers will discriminate against me.	4.60
I am worried that by accessing these services my private information will not be kept confidential, and will be disclosed to others.	15.10
Culturally-Important Barriers	
I would be more comfortable accessing the services/resources if they are offered in multiple languages, instead of just English.	20.40
I would be more comfortable using services/resources if there were interpreters that can translate them into my preferred language.	21.70
I am scared that mental health services providers will discriminate against me for my ethnicity.	10.50
I am scared that mental health service providers will discriminate against me for my religion.	3.90
I prefer traditional medicine over Canadian mental health and parenting resources.	5.30
I am worried that the other parents who may attend mental health group services will not be able to relate to me as a newcomer/immigrant parent.	9.90

Note. $N = 152$.

Table 6

Frequency of Features Preferred in an Online Mental Health Resource by Immigrant Parents

Feature	Frequency Endorsed (%)
How would you want to access content through an online resource or program?	
Web-based portal on computer or laptop	41.40
Web-based portal on tablet	21.70
Web-based portal on phone	30.90
Application on computer or laptop	17.10
Application on tablet	15.10
Application on phone	32.20
Text messages from a coach or healthcare provider	11.80
Emails from a coach or healthcare provider	17.10
Telephone calls with a coach or healthcare provider	7.20
Teletherapy or videoconferencing platforms (e.g., Zoom, Skype)	14.50
Teletherapy over the phone	5.90
Virtual meetings with a coach on a videoconferencing platform (e.g., Zoom, Skype)	19.10
How long would you want to be enrolled in an online mental health or parenting program?	
Less than one week	17.10
2-4 weeks	18.70
1-2 months	18.70
3-5 months	7.20
6-12 months	3.90
More than one year	5.90
Who would be your #1 choice to receive coaching from in an online mental health or parenting program?	
Peers	12.50
Community coaches	8.60
Medical doctors	18.40
Psychologists	30.30
Social workers	6.60

Note. Continued on next page. $N = 152$.

Table 6 Continued

Feature	Frequency Endorsed (%)
Which online feature would be your #1 way to address a family mental health challenge?	
Content, such as readings and videos, developed by experts (i.e., doctors, psychologists, social workers)	27.00
Content, such as readings and videos, developed by peers (i.e., fellow parents, community coaches)	5.30
Supportive online forum	6.60
Virtual peer coaching	4.60
Virtual individual therapy	7.20
Virtual couple therapy	2.60
Virtual family therapy	10.50
Virtual support group	2.00
None	2.00
Would you prefer a tailored or more general online program?	
Tailored information for my individual needs	47.40
A library of information that I can individually access	30.90
Is there anyone in your household that you would want to participate in a parenting program alongside you?	
Yes, my partner	32.20
Yes, another caregiver	.70
Yes, someone else	2.60
No	43.40
I don't know	6.60
Have you used any of the following online mental health or parenting resources?	
MoodMission	5.90
HeadSpace	9.90
Calm	14.50
SolidStarts	2.60
TalkSpace	5.30
MindShift	7.90
Bundoo	2.00
Have you used any of the following social media platforms for mental health or parenting support?	
Facebook	32.90
YouTube	34.20
Instagram	25.70
Reddit	7.90
Twitter	9.90
TikTok	11.20
Snapchat	5.90
Quora	4.60

Note. $N = 152$.

Table 7

Correlations

	1	2	3	4	5	6	7
1. Stressful Experiences	–						
2. Social Support	-.411**	–					
3. Resources	-.058	.322**	–				
4. Barriers	.387**	-.231**	.091	–			
5. Motivators	.480**	-.178*	.016	.584**	–		
6. Cultural Barriers	.322**	-.192*	.133	.614**	.461**	–	
7. Cultural Motivators	.388**	-.094	.094	.686**	.612**	.661**	–

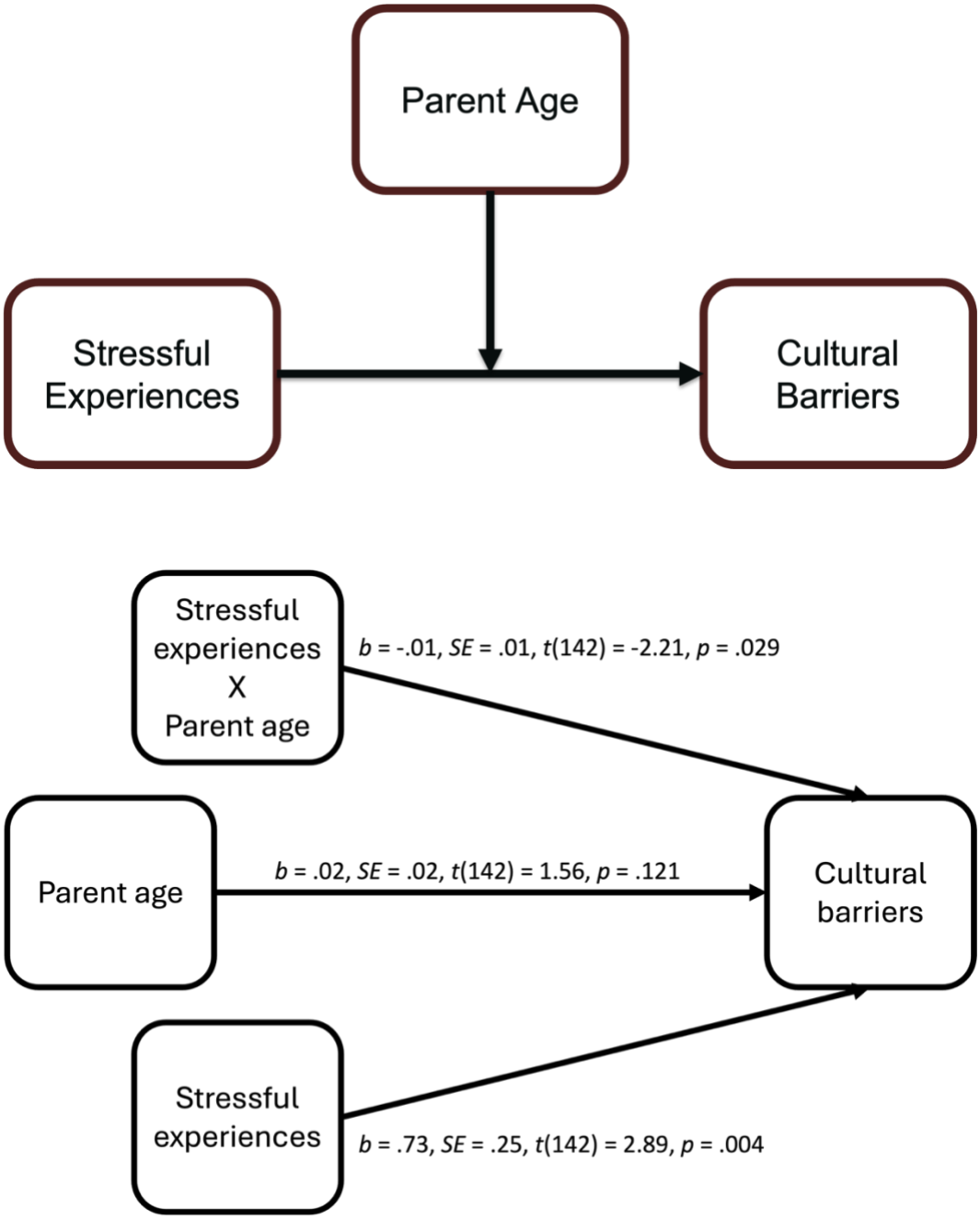
Note. $N = 147$.

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 1

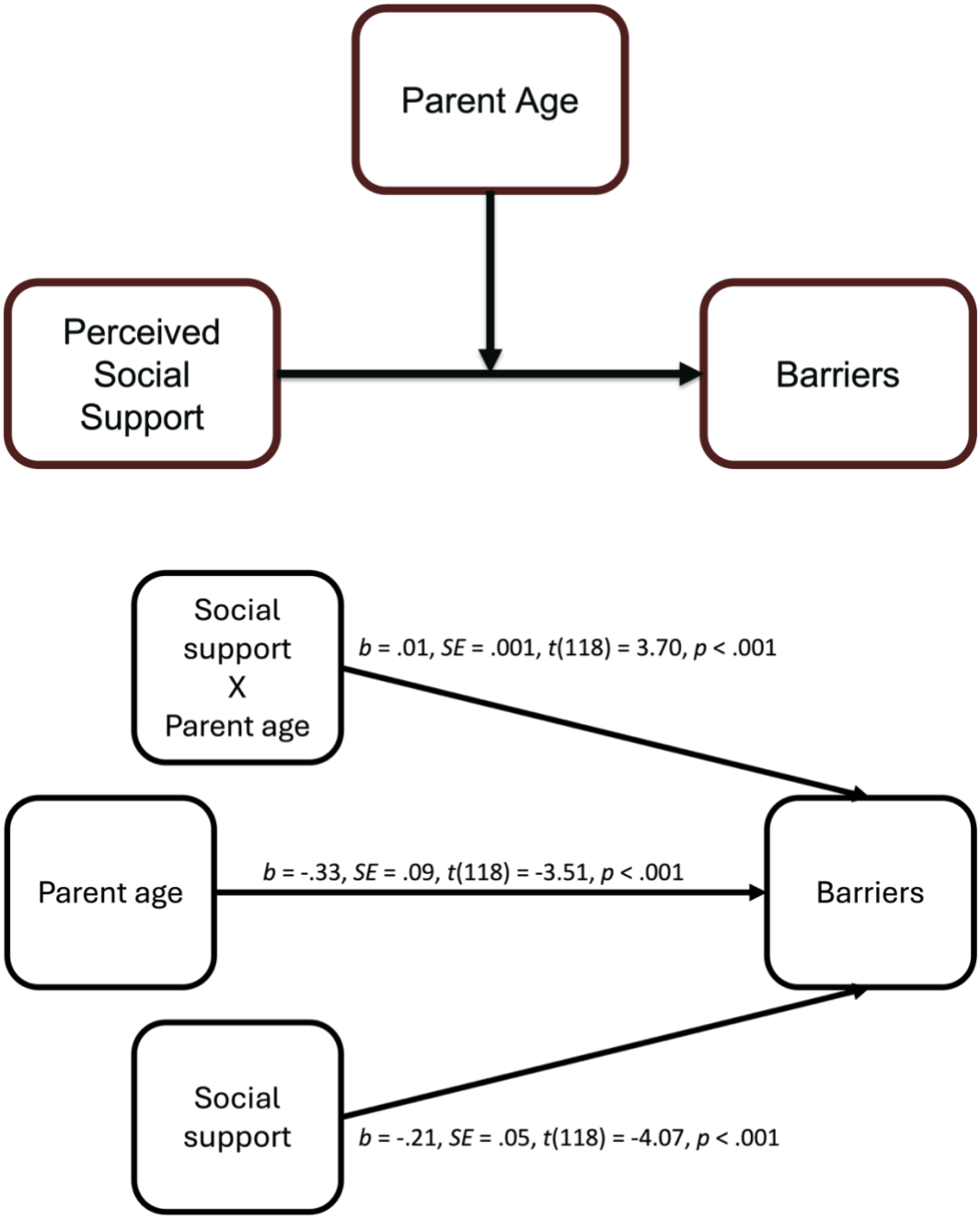
Moderation Analysis 1



Note. Conceptual model (top) and statistical model (bottom) of moderation analysis with stressful experiences as a predictor, cultural barriers as the outcome, parent age as a potential moderator, and child number added as a covariate.

Figure 2

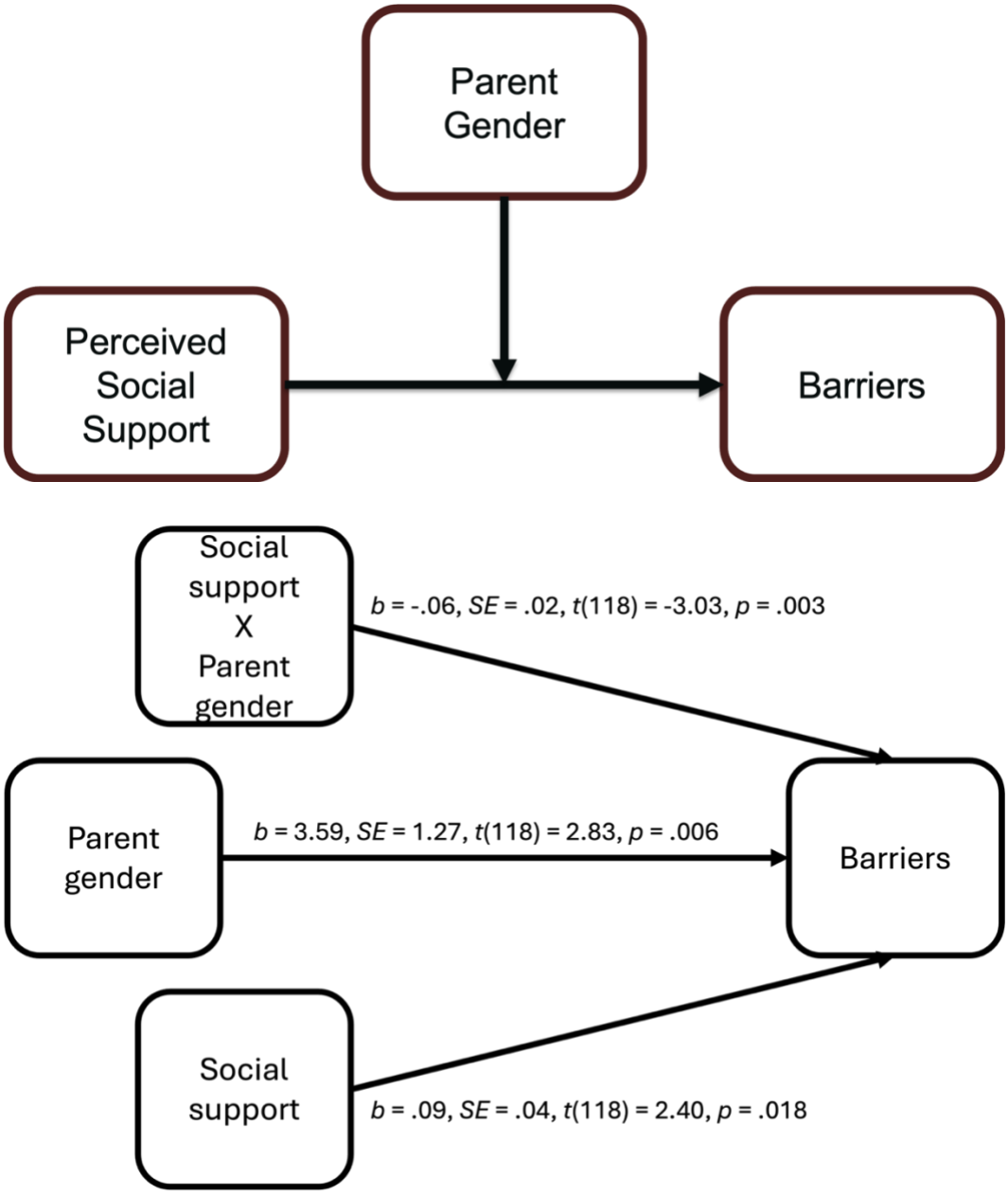
Moderation Analysis 2



Note. Conceptual model (top) and statistical model (bottom) of moderation analysis run with perceived social support as a predictor, barriers as the outcome, parent age as a potential moderator, and child number added as a covariate.

Figure 3

Moderation Analysis 3



Note. Conceptual model (top) and statistical model (bottom) of moderation analysis run with perceived social support as a predictor, barriers as the outcome, parent gender as a potential moderator, and child number added as a covariate.

APPENDIX C

Consent Form

Parent Preferences on Online Mental Health and Parenting Resources
Survey Informed Consent Form

Principal Investigator:
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This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

About this study:
You are invited to participate in a research study conducted by the Hearts and Minds Laboratory at the University of Manitoba. The purpose of this study is to learn about individual preferences when choosing and using a virtual mental health and/or parenting support platform. We are interested in what qualities make a virtual platform most appealing, and barriers and facilitators for using it. Your opinion will be used to improve virtual mental health and parenting programs so that parents can have a more helpful and rewarding experience.

Why am I being asked to participate in this study?
You are being asked to participate in this survey because you have a child between 0 to 5 years – old in Canada. We are interested in your preferences when it comes to mental health and parenting support programs, in order to understand unmet needs and opportunities for improvement of virtual platforms.

What will I do if I choose to participate?
If you choose to participate in this study, you will be asked to complete an eligibility screener survey. If you are deemed eligible via the screener, you will then complete a one-time survey.

Do I have to participate?

No. Your participation is voluntary, and you may end your participation at any time without penalty by closing the browser. You can choose to decline to answer any questions. Choosing not to participate in this study will not affect your relationships with the University of Manitoba or any organizations involved in the study and you will still receive your compensation. If you withdraw by closing the browser, you must contact the researchers via email (Hearts.andMinds@umanitoba.ca) to receive compensation. Of note, due to the nature of the survey (indirectly identifiable), we are unable to destroy any data that you have entered as it can not be linked back to you. Therefore, all partial responses will be analyzed in addition to the complete responses.

How much time does it take to participate?

The eligibility screener will take 1-2 minutes, and the full survey will take an estimated 25 – 30 minutes to complete.

How will your privacy (or confidentiality) be protected?

Your privacy is important to us. The information you provide in the survey will be indirectly identifiable. This data will be stored on the REDCap Online Survey platform and only the research team will have access to the data. Members of the research team accessing this data are trained according to the University of Manitoba's ethics protocols. All those with access to data have completed TCPS Core Ethics training and additional training on the Personal Health Information Act to ensure confidentiality. All researchers involved in the project have completed their PHIA and TCPS certificates and Oath of Confidentiality.

All data will be stored according to regulations set by the ethics board. Consent forms will be stored for 5 years after the end of the study, destroyed approximately (04/28). Your indirectly identifiable questionnaire responses will be stored indefinitely on secure University of Manitoba servers. Any identifying information, such as your name and email address, will be kept in a password-protected file on the secure University of Manitoba OneDrive. Only Dr. Roos, project coordinators, and select few trusted research personnel will have access to these servers. We will only keep this identifying information so that we can continue to contact you throughout the project. We may share data linked to a participant number, without identifiable information, on online open science data repositories. Only indirectly identifiable information will be posted. Open repositories are online platforms for sharing and accessing research papers, data, and materials. Any future use of this research data is required to undergo a review by a Research Ethics Board.

Indirectly identifiable data (e.g., standardized questionnaire responses, aggregated program use data, sociodemographics linked to a participant number) may be made available on public data platforms such as open science framework or a requirement by a granting agency or journal, or the University of Manitoba, MSpace (an open access repository where theses are posted). In open-ended questions where you would type a response, quotes from your responses may be taken and posted, however, we will not use your name, it may be posted using a general descriptor (e.g., "One new incomer participant explained that...").

Any information sent out of the University of Manitoba will not show your name or address, or any other identifiable personal information about you, as your name and email will not be linked to your responses.

What are the possible risks to you as a participant taking this survey?

We have not identified any significant risks related to this study. Should you experience distress when responding to any question, you may choose to not answer and/or withdraw from the survey by closing the REDCap browser. We expect any discomfort experienced to be temporary. At the end of the survey, a list of crisis resources for mental health and family stress will be provided.

What are the potential benefits to you as a participant?

Participating will help researchers and treatment providers understand the features that parents desire in virtual mental health and parenting support program platforms. You may benefit from participating in this study by reflecting on your experiences with virtual mental health and/or parenting resources, which could help you identify appropriate resources in the future. You will have the opportunity to contribute to improving the quality of virtual platforms by providing feedback.

What will be done with the results of this survey?

Your responses will be used to improve current virtual mental health and parenting programs. In addition, research findings may be shared with the public, scientific journals, or funding agencies through the publications of aggregated results or in presentations. The data collected will be used in a student's Master's thesis, and thus may be stored in the University of Manitoba's MSpace institutional repository. We will not use your name or your identity in any presentations or publications.

Will you be compensated for your participation?

Upon completion of the survey, you will receive compensation through AskingCanadians within 1-3 business days. The compensation will be equivalent to $9.00 CAD and will be delivered as points through your desired loyalty program (AskingCanadians Points, Hudson's Bay Rewards, Aeroplan, Petro-Points, and Via Préférence).

If you have questions

If you have any questions, please feel free to contact the research team at Hearts.andMinds@umanitoba.ca.

By clicking "Agree" on this form, you will indicate that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Officer at 204-474-7122 or HumanEthics@umanitoba.ca.

- ❑ Agree
- ❑ Decline

Name _____
Last Name _____

Do you wish to receive study results via email (est. completion June 2023):

❑ Yes (Please provide email): _____
If you would like us to remove your email at any point, please email Hearts.andMinds@umanitoba.ca

❑No

Would you like to be contacted for future studies?

❑ Yes (Please provide email): _____
If you would like us to remove your email at any point, please email Hearts.andMinds@umanitoba.ca

❑ No

Print this page for your records.

Please see a resource list of Canada-wide mental health and parenting resources below.

APPENDIX D

Survey Measures Created for This Study

Parent and Family Sociodemographic Information

Instructions: Complete the following sociodemographic information about yourself and the oldest child that you act as a caregiver for who is between the ages of 0 – 5 years old. Please note that all personal information will be kept confidential.

1. **What are the first three digits of your postal code? If you would prefer not to answer this question, please type 888 into the text box**

   _____

2. **When were you born (month and year)?**

	Month	Year
Please Select:	▼ (January, February ... December, Prefer not to answer)	▼ (1900, 1901, ... 2023, Prefer not to answer)

3. **What is your gender identity?**
   - o Man
   - o Woman
   - o Non-binary
   - o Two-spirit
   - o Not listed (please specify): _____
   - o Prefer not to answer
4. **What sex were you assigned at birth, on your original birth certificate?**
   - o Male
   - o Female
   - o Intersex
   - o Prefer not to answer
5. **How would you identify your sexual orientation?**

- Heterosexual
- Lesbian
- Gay
- Bisexual
- Questioning
- Unlabelled
- Unsure
- Not listed (please specify):_____
- Prefer not to answer

6. **Which of the following reflects your ethnic background? (Check all that apply)**
   - ❑ Indigenous (e.g. First Nations, Métis, or Inuit)
   - ❑ Latin American (e.g. Argentina, Mexico, Nicaragua)
   - ❑ East Asian (e.g. China, Japan, Korea, Taiwan)
   - ❑ Indo-Caribbean (e.g. Guyanese with Indian origins)
   - ❑ Black Caribbean
   - ❑ South Asian (e.g. India, Sri Lanka, Pakistan)
   - ❑ Middle Eastern (e.g. Egypt, Iran, Israel, Saudi Arabia)
   - ❑ Southeast Asian (e.g. Vietnam, Malaysia, Philippines)
   - ❑ White Canadian or White American
   - ❑ White European (e.g. England, Greece, France, Sweden, Russia)
   - ❑ Black Canadian or African-American
   - ❑ Black African
   - ❑ Not listed (please specify): _____
   - ❑ ⊗Prefer not to answer
7. **Were you born in Canada?**
   - Yes
   - No
   - Prefer not to answer

   Branching logic: if participant responded "no" to previous question…

   a. **What country were you born in? If you would prefer not to answer this question, please type 888 into the text box**

_____

b. What country or countries were you raised in? If you would prefer not to answer this question, please type 888 into the text box

_____

c. **How many years has it been since you moved to Canada?**

1. Less than five years ago
2. 5-7 years ago
3. 8-10 years ago
4. 10-12 years ago
5. 13-15 years ago
6. Over 15 years ago
7. Prefer not to answer

8. What language(s) do you speak? (Check all that apply)

- ❑ English
- ❑ French
- ❑ Mandarin
- ❑ Punjabi
- ❑ Cantonese
- ❑ Spanish
- ❑ Arabic
- ❑ Tagalog
- ❑ Urdu
- ❑ Russian
- ❑ Korean
- ❑ Iranian Persian
- ❑ Indigenous language (e.g., Cree, Ojibiway)
- ❑ Not listed (please specify): _____
- ❑ ⊗ Prefer not to answer

9. Which language do you speak most often at home?

- o English
- o French

- Mandarin
- Punjabi
- Cantonese
- Spanish
- Arabic
- Tagalog
- Urdu
- Russian
- Korean
- Iranian Persian
- Indigenous language (e.g., Cree, Ojibiway)
- Not listed (please specify): _____
- Prefer not to answer

10. What is your highest level of education attained?

- Some high school (secondary school), no diploma
- High school diploma
- Diploma from trade/technical/vocational training
- Diploma from a CEGEP
- Associate degree or undergraduate certificate from a university or college
- Bachelor's degree
- Master's degree
- Professional degree (e.g., MD, JD, DDS)
- Doctoral degree (e.g., PhD, PsyD, EdD)
- Not listed (please specify): _____
- Prefer not to answer

11. What is your marital status?

- Single, never married
- Married or in a common-law/domestic partnership
- Widowed
- Divorced
- Separated

- Prefer not to answer

12. What best describes your regular daily activities and responsibilities? (Check all that apply)

- ❑ Working full-time
- ❑ Working part-time
- ❑ Unemployed
- ❑ On leave
- ❑ Retired
- ❑ Full-time student
- ❑ Part-time student
- ❑ Homemaker or stay-at-home parent
- ❑ Not listed (please specify): _____
- ❑ ⊗ Prefer not to answer

13. What is your total household income in 2022, before taxes and deductions (including all household members)?

- $0-$19 999
- $20 000-$39 999
- $40 000-$69 999
- $70 000-$99 999
- $100 000-$124 999
- $125 000-$149 999
- $150 000-$174 999
- $175 000-$199 999
- $200 000 or more
- Prefer not to answer

14. Financially, how well off do you think you are currently?

- Very well off
- Quite well off
- Average
- Not very well off
- Not at all well off

- Prefer not to answer

15. How many children do you have?

- 1
- 2
- 3
- 4
- 5
- 6+
- Prefer not to answer

Thinking of your oldest child between the ages of 0-5, please respond to the following questions:

16. When was your child born (month and year)?

	Month	Year
Please Select:	▼ (January, February ... December, Prefer not to answer)	▼ (2017, 2018, ... 2023, Prefer not to answer)

17. What is your relation to the child?

- Biological parent
- Adoptive parent
- Foster parent
- Stepparent
- Grandparent
- Relative caregiver
- Not listed (please specify): _____
- Prefer not to answer

18. How often does the child reside in your household?

- Full-time
- Part-time (half or more of the time)
- Part-time (less than half of the time)
- Not listed (please specify): _____

- Prefer not to answer

19. Do you view yourself as the primary caregiver for this child?

- Yes
- No
- I share primary caregiving responsibilities equally with another caregiver
- Prefer not to answer

20. Is your child currently involved in part-time or full-time childcare?

- Yes, part-time
- Yes, full-time
- No
- Prefer not to answer

Branching logic: if participant responded "no" to previous question…

a. If not, would you like them to be?

- Yes
- No
- Prefer not to answer

Parent Preferences Questionnaire

Instructions: The following section includes questions related to your preferences for engaging in an eHealth (**online**) resource focused on family mental health. The term family mental health refers to a range of challenges that many families experience, such as 1) mental health problems for parents, 2) mental health problems for children, and 3) family conflict between two caregivers or between a caregiver and a child.

1. **Content through eHealth resources can be delivered in a variety of different ways. How would you want to access content through a program? (Check all that apply)**
   - ❑ Web-based portal on computer or laptop
   - ❑ Web-based portal on tablet
   - ❑ Web-based portal on phone
   - ❑ Application on computer or laptop
   - ❑ Application on tablet
   - ❑ Application on phone
   - ❑ Text messages from a coach or healthcare provider
   - ❑ Emails from a coach or healthcare provider
   - ❑ Teletherapy on videoconferencing platforms (e.g., Zoom, Skype)
   - ❑ Teletherapy over the phone
   - ❑ Virtual meetings with a coach on a videoconferencing platform (e.g., Zoom, Skype)
   - ❑ Telephone calls with a coach or healthcare provider
   - ❑ Not listed (please specify): _____
   - ❑ ⊗Prefer not to answer
2. **How long would you want to be enrolled in a program?**

- <1 week
- 2 - 4 weeks
- 1 - 2 months
- 3 - 5 months
- 6 - 12 months
- >1 year
- Prefer not to answer

3. **How long (hours and minutes) would you want to spend engaging in a program?**
    i. Each day: ___ hours ___minutes
    ii. Each week: ___ hours ___minutes
    iii. Each month: ___ hours ___minutes
    - Prefer not to answer
4. **How many reminders/notifications from the program would you want to receive?**
    i. Each day: ___
    ii. Each week: ___
    iii. Each month: ___
    - Prefer not to answer
5. **If you were experiencing family mental health challenges, which of the following eHealth features would you be interested in accessing…**
    a. **immediately? (Check all that apply)**
        - ❑ Content, such as readings and videos, developed by experts (i.e., doctors, psychologists, social workers)
        - ❑ Content, such as readings and videos, developed by peers (i.e., fellow parents, community coaches)
        - ❑ Supportive online forum
        - ❑ Virtual peer coaching
        - ❑ Virtual individual therapy
        - ❑ Virtual couple therapy
        - ❑ Virtual family therapy
        - ❑ Virtual support group
        - ❑ Not listed (please specify): _____

- ❑ ⊗None
- ❑ ⊗Prefer not to answer

b. in six months, if the challenges persisted? (Check all that apply)

- ❑ Content, such as readings and videos, developed by experts (i.e., doctors, psychologists, social workers)
- ❑ Content, such as readings and videos, developed by peers (i.e., fellow parents, community coaches)
- ❑ Supportive online forum
- ❑ Virtual peer coaching
- ❑ Virtual individual therapy
- ❑ Virtual couple therapy
- ❑ Virtual family therapy
- ❑ Virtual support group
- ❑ Not listed (please specify): _____
- ❑ ⊗None
- ❑ ⊗Prefer not to answer

Branching logic: If participant did not check "none" or "prefer not to answer" on 5a OR 5b

6. Which eHealth feature would be your #1 preferred way to address a family mental health challenge?

- o Content, such as readings and videos, developed by experts (i.e., doctors, psychologists, social workers)
- o Content, such as readings and videos, developed by peers (i.e., fellow parents, community coaches)
- o Supportive online forum
- o Virtual peer coaching
- o Virtual individual therapy
- o Virtual couple therapy
- o Virtual family therapy
- o Virtual support group
- o Not listed (please specify): _____
- o None

- Prefer not to answer

Descriptive text: eHealth programs can be structured in different ways. The following set of questions ask about your preferences in program structure.

7. **Self-directed programs allow participants to engage with content of their choosing while structured programs have participants engage with specified content. Would you want a program to be self-directed or structured?**

Self-directed Mix of Both Structured

0 25 50 75 100

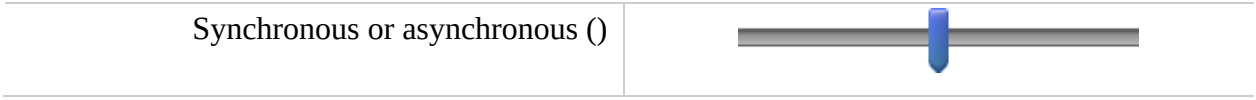
i. Prefer not to answer

8. **Asynchronous programs allow participants to engage with the content on their own convenience while synchronous programs have participants engage with the content at a regular time each week. Would you want a program to be synchronous or asynchronous?**

Synchronous Mix of Both Asynchronous

0 25 50 75 100

Synchronous or asynchronous ()



i. Prefer not to answer

9. **Expert-driven programs are led by experts in family mental health, such as psychologists, social workers, and medical doctors. Peer-driven programs are led by**

fellow parents and community coaches. Would you like a program to be expert- or peer-driven?

Expert-driven Mix of Both Peer-driven

0 25 50 75 100

i. Prefer not to answer

10. Would you want a program to provide

- Tailored information for your individual needs
- A library of information that you can individually access
- Prefer not to answer

11. Would you want to receive coaching from: (Check all that apply)

- ❑ Peers
- ❑ Community coaches
- ❑ Medical doctors
- ❑ Psychologists
- ❑ Social workers
- ❑ Not listed (please specify): ____
- ❑ ⊗Prefer not to answer

Branching logic: If participant did not check prefer not to answer option on the previous question

12. Who would be your #1 choice to receive coaching from:

- Peers
- Community coaches
- Medical doctors
- Psychologists
- Social workers
- Not listed (please specify): ____

- Prefer not to answer

13. How important would it be to have fellow <u>parents</u> on the platform with a shared identity in the following domains:

	Very unimportant	Somewhat Unimportant	Neither unimportant or important	Somewhat important	Very important	Prefer not to answer
Age	○	○	○	○	○	○
Gender	○	○	○	○	○	○
Religion	○	○	○	○	○	○
Culture	○	○	○	○	○	○
Ethnicity	○	○	○	○	○	○
Sexual Orientation	○	○	○	○	○	○
Education Level	○	○	○	○	○	○

14. How important would it be to have a <u>coach</u> with a shared identity in the following domains:

	Very unimportant	Somewhat Unimportant	Neither unimportant or important	Somewhat important	Very important	Prefer not to answer
Age	○	○	○	○	○	○
Gender	○	○	○	○	○	○
Religion	○	○	○	○	○	○
Culture	○	○	○	○	○	○
Ethnicity	○	○	○	○	○	○
Sexual Orientation	○	○	○	○	○	○
Education Level	○	○	○	○	○	○

15. Is there anyone in your household that you would want to participate in a parenting program alongside you?

- o Yes, my partner
- o Yes, another caregiver
- o Yes, someone else (please specify): _____
- o Maybe
- o No
- o I don't know

- Prefer not to answer

Branching logic: If participant responded with "yes, my partner" OR "yes, another caregiver" OR "yes, someone else" to previous question

16. How would you want this person to participate? (Check all that apply)

- ❑ Interact with content separately
- ❑ Interact with content with you
- ❑ Contribute to group discussions separately
- ❑ Contribute to group discussions with you
- ❑ Complete home practice activities separately
- ❑ Complete home practice activities with you
- ❑ ⊗Prefer not to answer

17. How much would you like to have access to the following features:

	Dislike a great deal	Dislike somewhat	Neither like nor dislike	Like somewhat	Like a great deal	Prefer not to answer
Home practice activities	○	○	○	○	○	○
Daily reminders	○	○	○	○	○	○
Weekly reminders	○	○	○	○	○	○
Progress and symptom monitoring	○	○	○	○	○	○
Connecting with parents through a forum	○	○	○	○	○	○

18. How would you want content to be presented? (Check all that apply)

- ❑ Audio-only materials, such as podcasts and audio testimonials
- ❑ Visual-only materials, such as articles and blog posts
- ❑ Audio-visual materials, such as video roleplays and presentations
- ❑ ⊗Prefer not to answer

Branching logic: if participant checked audio-only materials option on question 17

19. For audio-only materials (podcasts, audio testimonials)...

a. **How long would you want to listen to family mental health content in a day (in minutes)?**

0 60+

i. Prefer not to answer

b. **If the audio clips were 3-minutes long, how many would you want to listen to in a week?**

0 3 6+

i. Prefer not to answer

Branching logic: if participant checked visual-only materials option on question 17

20. For visual-only materials (articles, blog posts, infographics)...

a. **How long would you want to read family mental health content in a day (in minutes)?**

0 60+

i. Prefer not to answer

b. If each material was 1-page long, how many pages of family mental health content would you want to read in a week?

0 3 6+

i. Prefer not to answer

Branching logic: if participant checked audio-visual materials option on question 17

21. For audio-visual materials (such as video role-plays, video presentations, video testimonials)...

a. **How long would you want to watch family mental health content at in a day (in minutes)?**

0 60+

i. Prefer not to answer

b. **If each video was 3-minutes long, how many videos of family mental health content would you want to watch each week?**

0 3 6+

i. Prefer not to answer

22. Have you used any of the following online mental health or parenting resources? (Check all that apply)

- ❑ MoodMission
- ❑ HeadSpace
- ❑ Calm
- ❑ SolidStarts
- ❑ TalkSpace
- ❑ MindShift
- ❑ Bundoo
- ❑ Not listed (please specify): _____
- ❑ ⊗None
- ❑ ⊗Prefer not to answer

23. What did you like about the resource(s) you used? If you would prefer not to answer this question, please type 888 into the text box

_____

24. What did you dislike about the resource(s) you used? If you would prefer not to answer this question, please type 888 into the text box

_____

25. Have you used any of the following social media platforms for mental health or parenting support? (Check all that apply)

- ❑ Facebook
- ❑ Youtube
- ❑ Instagram
- ❑ Reddit
- ❑ Twitter
- ❑ TikTok
- ❑ Snapchat
- ❑ Quora
- ❑ Not listed (please specify): _____
- ❑ ⊗None
- ❑ ⊗Prefer not to answer

Branching logic for questions 26-28: if participant did not check "none" or "prefer not to answer" for question 25.

26. What did you like about the social media platform(s) you used for support? If you would prefer not to answer this question, please type 888 into the text box

_____

27. What did you dislike about the social media platform(s) you used for support? If you would prefer not to answer this question, please type 888 into the text box

_____

28. How useful did you find the mental health and/or parenting support you received from social media?

Not Useful Neutral Very Useful

0 10 20 30 40 50 60 70 80 90 100

i. Prefer not to answer

29. Which of the following factors could you foresee being a potential barrier to being involved in an online mental health or parenting program? (Check all that apply)

- ❑ Wi-Fi capabilities (e.g., slow internet)
- ❑ Limited access to electronic device within household (e.g., devices being used by other members of the household)
- ❑ Functional capabilities of electronic device (e.g., unable to download applications)
- ❑ Technology literacy (e.g., lacking knowledge in navigating online platforms)
- ❑ Lack of time (e.g., limits on the amount of time to spend on program)
- ❑ Lack of space (e.g., no private space to participate in program within the home)
- ❑ Lack of childcare (e.g., no one to look after child while participating in program)
- ❑ Lack of interest (e.g., losing interest in the program)
- ❑ Not listed (please specify): _____
- ❑ ⊗None
- ❑ ⊗Prefer not to answer

30. What would help facilitate your involvement in an online mental health or parenting program? If you would prefer not to answer this question, please type 888 into the text box

_____

Barriers and Facilitators Questionnaire

Instructions: The following section includes questions related to facilitators that may encourage or restrict your participation in family mental health programs, including both parenting and/or mental health programs (**online OR in-person)**.

1. **What are some factors that motivate you to access family mental health resources in Canada? (Check all that apply)**
   - ❑ I want to improve my mental health
   - ❑ I want to learn more ways to be a good parent to my child(ren)
   - ❑ I can easily access information about the mental health and parenting resources available to me
   - ❑ My family and/or friends support my use of mental health services and parenting resources
   - ❑ I want to access family mental health resources that have both in-person and online/remote options for service.
   - ❑ Not listed (please specify): _____
   - ❑ ⊗Prefer not to answer

Branching logic: if participant responded "no" to question 7 on the sociodemographic portion

2. **What are some <u>culturally-important</u> factors that <u>motivate</u> you to access <u>family mental health resources</u> in Canada? (Check all that apply)**
   - ❑ There are programs offered in the language I am most comfortable speaking in.
   - ❑ There are interpreters available to help me use family mental health resources
   - ❑ I think mental health service providers will understand and be considerate of me and my culture.
   - ❑ I think that available family mental health resources will take my culture into consideration.
   - ❑ I trust that Canadian family mental health resources can help me and my family.
   - ❑ Not listed (please specify): _____
   - ❑ ⊗Prefer not to answer

3. **What are some factors that <u>prevent</u> you from accessing <u>family mental health resources</u> in Canada? (Check all that apply)**
   - ❑ I am worried about what others will think if I use mental health services and parenting resources
   - ❑ I am worried what others will think if I am diagnosed with a mental illness.
   - ❑ I do not think I will be able to afford the financial cost of accessing mental health services and parenting resources
   - ❑ I do not know where to find information about the mental health services and parenting resources available to me
   - ❑ I do not think mental health service providers will understand or be sensitive to my culture
   - ❑ I think that my friends and/or family will judge me for accessing mental health services and parenting resources
   - ❑ I am scared that mental health service providers will discriminate against me
   - ❑ I am worried that by accessing these services my private information will not be kept confidential, and will be disclosed to others (such as my child's school, child and family services, etc.)
   - ❑ Not listed (please specify):_____
   - ❑ ⊗Prefer not to answer

Branching logic: if participant responded "no" to question 7 on the sociodemographic portion

4. **What are some <u>culturally-important</u> factors that <u>prevent</u> you from accessing <u>family mental health resources</u> in Canada? (Check all that apply)**
   - ❑ I would be more comfortable accessing the services/resources if they are offered in multiple languages, instead of just English.
   - ❑ I would be more comfortable using services/resources if there were interpreters that can translate the services/resources into my preferred language.
   - ❑ I am scared that mental health service providers will discriminate against me for my ethnicity.
   - ❑ I am scared that mental health service providers will discriminate against me for my religion.
   - ❑ I prefer traditional medicine over Canadian mental health and parenting resources.
   - ❑ I am worried that the other parents who may attend mental health group services will not be able to relate to me as a newcomer/immigrant parent.
   - ❑ Not listed (please specify): _____
   - ❑ ⊗Prefer not to answer

Branching logic: if participant responded "no" to question 7 on the sociodemographic portion

5. **Are there other supports (e.g., prayer, music, social support, etc.) that you feel are better equipped to support your mental health compared to family mental health programs? Why or why not? If you would prefer not to answer this question, please type 888 into the text box**

   _____

Branching logic: if participant responded "no" to question 7 on the sociodemographic portion

6. **Please rate the following statement using the scale below: "I trust mental health service providers to provide me with optimal and equal care compared to other people."**

Totally Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Totally Agree	Prefer not to answer
1	2	3	4	5	6

Branching logic: If participant responded "totally disagree" or "somewhat disagree" on previous question

6.1. Why do you disagree with the above statement? If you would prefer not to answer this question, please type 888 into the text box

_____ _____

_____ _____

7. **What other items/factors would make you feel more comfortable or motivated to utilize Canadian mental health services and parenting resources? If you would prefer not to answer this question, please type 888 into the text box**

_____