Making Mindfulness Matter with Arabic Speaking Families: A Process Evaluation Study

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Abstract
Arabic-speaking refugees experience a significant amount of trauma in their pre-and post-migration journey in Canada, which can negatively impact their well-being. Mindfulness programs have demonstrated wide-ranging benefits for children and youth, but there is a gap in the literature on providing culturally based mindfulness programs to refugee families. The present study conducted a process evaluation for the culturally adapted version of the Making Mindfulness Matter (M3) program (an 8-week concurrent parent and children mindfulness intervention), to assess program successes and challenges with families. Three groups were run, and a total of nine families recruited from the Muslim Resources Centre for Social Support and Integration participated. Parents (n=8) and children (n=9) completed the weekly feedback survey on program activities and completed a mindfulness knowledge questionnaire at the beginning and end of the program. Researchers documented curriculum activities completed each week, and a focus group was conducted with mindfulness program facilitators (n=4) to understand barriers to delivering the M3 program. A thematic analysis was conducted for parents’ and facilitators’ feedback. Children (n=9) had a significant increase in their awareness of mindfulness concepts. The parents’ mean comparison score on the mindfulness survey between before and after the program showed no significant difference; however, scores were moving in the right direction. Preliminary results indicated that the implementation of the M3 program was a success with notable challenges in the practicality of online programming.

Keywords: Refugees, Mindfulness, Family intervention, Parent-child wellbeing, Process Evaluation
Summary for Lay Audience

Arabic-speaking refugees are exposed to violence and destruction when they flee their home country. As a result, parents and children’s mental health is impacted. Mindfulness has been shown to improve both parents and children’s mental health. Unfortunately, there is a gap in the literature on providing culturally sound mindfulness programs for the whole family.

The focus of the current study was to evaluate the culturally adapted version of a mindfulness-based program called Making Mindfulness Matter (M3) with Arabic-speaking newcomer families. The M3 program is an eight-week online parent-child program. Families learned about mindfulness awareness, stress, perspective taking, kindness, and gratitude. Families are provided with strategies to use when they feel frustrated, anxious, or upset. Parents learned how to mindfully respond to their children rather than react.

The purpose of this study was to create and evaluate the implementation of the culturally adapted version of the M3 program. The researcher used a process evaluation plan to help explain what happened in the program and why the program worked or did not work. The process evaluation plan included six elements: fidelity, dose delivered, dose received, reach, recruitment, and context.

Nine families were involved in the study. Families and facilitators completed surveys before and after each session. These initial results showed that a culturally adapted version of the M3 program was generally successful with Arabic-speaking refugees. However, there needs to be more research to measure if the concurrent mindfulness-based intervention is practical with Arabic-speaking newcomer families.
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# TABLE OF CONTENTS

**ABSTRACT** .................................................................................................................................................. I

**SUMMARY FOR LAY AUDIENCE** .................................................................................................................. II

**ACKNOWLEDGMENTS** ................................................................................................................................. III

**TABLE OF CONTENTS** .................................................................................................................................... IV

**LIST OF TABLES** ............................................................................................................................................. VI

**LIST OF FIGURES** .......................................................................................................................................... VII

**LIST OF APPENDICES** .................................................................................................................................. VIII

**CHAPTER 1: INTRODUCTION** ........................................................................................................................... 1

*Process Evaluation Plan* .................................................................................................................................. 3

*Literature Review* ......................................................................................................................................... 4

*Refugee Experiences Prior to Immigration* .................................................................................................... 4

*Refugee Experiences Upon Immigration* ...................................................................................................... 6

*The Mental Health and Well-being of Refugee Parents and Children and the Impact on Parenting and the Family* ........................................................................................................................................................................... 7

*Interventions with Refugee Families* ............................................................................................................... 14

*Mindfulness-Based Intervention with Refugees* ............................................................................................. 16

*The Making Mindfulness Matter Program* ...................................................................................................... 18

*Applied Theory of Change Model for Family Well-being and Subsequent M3 Logic Model* ......................... 27

*The Present Study* ......................................................................................................................................... 29

**CHAPTER 2: METHODOLOGY** ........................................................................................................................... 29

*Study Design* ................................................................................................................................................ 30

*Participants* .................................................................................................................................................. 30

*Procedure* ................................................................................................................................................... 31

*Cultural Adaptation of M3* ........................................................................................................................... 31

*Delivery of the Culturally Adapted M3 Program Intervention* ........................................................................ 32

*Measures* .................................................................................................................................................... 34

*Parent Measures* ........................................................................................................................................ 34

*Child Measures* ........................................................................................................................................... 35
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITATOR MEASURE</td>
<td>36</td>
</tr>
<tr>
<td>STATISTICAL ANALYSIS</td>
<td>41</td>
</tr>
<tr>
<td>CHAPTER 3: RESULTS</td>
<td>43</td>
</tr>
<tr>
<td>DEMOGRAPHIC INFORMATION</td>
<td>43</td>
</tr>
<tr>
<td>PROCESS EVALUATION RESULTS</td>
<td>47</td>
</tr>
<tr>
<td>FIDELITY</td>
<td>47</td>
</tr>
<tr>
<td>DOSE DELIVERED</td>
<td>48</td>
</tr>
<tr>
<td>DOSE RECEIVED</td>
<td>49</td>
</tr>
<tr>
<td>RECRUITMENT</td>
<td>57</td>
</tr>
<tr>
<td>REACH</td>
<td>58</td>
</tr>
<tr>
<td>CONTEXT</td>
<td>59</td>
</tr>
<tr>
<td>CHAPTER 4: DISCUSSION</td>
<td>61</td>
</tr>
<tr>
<td>PROCESS EVALUATION</td>
<td>61</td>
</tr>
<tr>
<td>FIDELITY</td>
<td>61</td>
</tr>
<tr>
<td>DOSE RECEIVED</td>
<td>63</td>
</tr>
<tr>
<td>RECRUITMENT</td>
<td>70</td>
</tr>
<tr>
<td>REACH</td>
<td>71</td>
</tr>
<tr>
<td>CONTEXT</td>
<td>73</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>75</td>
</tr>
<tr>
<td>FUTURE RESEARCH AND IMPLICATION</td>
<td>76</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>77</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>78</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>92</td>
</tr>
<tr>
<td>CURRICULUM VITAE</td>
<td>130</td>
</tr>
</tbody>
</table>
List of Tables

Table 1: M3 Session Objectives ........................................................................................................20
Table 2: M3 Session Overview ........................................................................................................22
Table 3: M3 Program Logic Model for Family Resiliency..........................................................29
Table 4: Process Evaluation Plan for the Culturally Adapted version of M3 ..................38
Table 5: Qualitative Thematic Analysis Procedure.................................................................42
Table 6: Demographic Characteristics.......................................................................................45
Table 7: Frequency of practice of M3 skills ............................................................................51
Table 8: Children’s Mindfulness Survey.....................................................................................56
Table 9: Parents’ Mindfulness Self-Assessment.......................................................................57
List of Figures

Figure 1: *Enrollment in the M3 Research Study* .................................................................44

Figure 2: *Reason for Practicing Mindfulness* .................................................................52
List of Appendices

Appendix A: Codes by Theme ................................................................. 92
Appendix B: Parent Consent Form .......................................................... 95
Appendix C: Child Assent Form ............................................................... 100
Appendix D: Telephone Script for MRCSSI ............................................. 103
Appendix E: Initial Research Telephone Contact Script ............................. 105
Appendix F: Parent Demographic Form .................................................. 107
Appendix G: Mindful Parenting Self-Assessment ...................................... 110
Appendix H: Child Mindfulness Survey .................................................... 111
Appendix I: Parent Weekly Feedback Questionnaire .................................. 112
Appendix J: Child Weekly Feedback Questionnaire .................................... 114
Appendix K: Program Adherence Checklist ............................................. 115
Appendix L: Parent program PowerPoint slide ......................................... 118
Appendix M: Parent Session Handout .................................................... 119
Appendix N: The Family Resource Cards ............................................... 120
Appendix O: Letter of Information for Community Providers ..................... 121
Appendix P: Focus Group Recruitment Script .......................................... 125
Appendix Q: Focus Group Questions .................................................... 126
Appendix R: Adapted Applied Theory of Change Model for Family Well-Being .... 127
Appendix S: WREM Ethics Approval ..................................................... 128
Chapter 1: Introduction

Between 2015 and 2018, Canada accepted 50,000 Syrian refugees, primarily coming as family units of parents with children (Statistics Canada, 2018). Before arriving in Canada, such refugees often experience traumatic events, including exposure to violence and destruction in their pre-migration journey (Atari-Khan et al., 2021). As a result of these adverse events related to the displacement of refugee families, refugee parents face more significant mental health problems and psychopathology than host populations (Hodes et al., 2018). Additionally, their parenting capacity is often diminished. Due to this, refugee children have many more significant mental health problems such as post-traumatic stress disorder (PTSD), anxiety, and depression compared to non-refugee children (Kronick, 2018). Therefore, there is a need to provide increased support for the entire refugee family in their post-migration journey in their host country. Specifically, there is a need to increase resilience in this population due to the traumatic experiences and adversity that they have encountered.

Given this elevated incidence of mental health problems, any intervention that would facilitate refugee children’s adaptation to a new social context can positively impact their mental health and psychological well-being (Mohamed & Thomas, 2017). Therefore, the present study was a process evaluation of a mindfulness-based intervention for newcomer populations. This study evaluated the culturally adapted version of the Making Mindfulness Matter© (M3) program (Bax et al., 2021) with newcomer children and families arriving from war-torn countries.

Mindful awareness, social-emotional skills, and positive psychology practices (e.g., practicing gratitude and developing a growth mindset) have been demonstrated to improve mental health outcomes and the well-being of children and adults (Brody et al., 2018; Kil &
The present study involved culturally adapting an established family resiliency intervention called Making Mindfulness Matter (M3) © with Arabic-speaking newcomer families arriving from war-torn countries. A process evaluation was conducted to understand the successes and limitations of program implementation elements with this differing population. Saunders et al. (2005) defined process evaluation as “monitor[ing] and document[ing] program implementation ...[that] can aid in understanding the relationship between specific program elements and program outcomes (p. 134).” Process evaluation helps in confirming that the intervention was implemented appropriately before using resources to assess its effectiveness. Vital elements for process-evaluation plans include fidelity, dose (delivered and received), reach, recruitment, and context (Saunders et al., 2005). This implementation evaluation is critical to consider the next step of evaluating the effectiveness of the culturally adapted M3 program.

For this paper, the population of interest was refugees; however, the terms refugee and newcomer are used interchangeably, although they have slightly different meanings. Refugees are people who are forced to leave their country of origin due to fear of oppression or war (World Health Organization, 2020) and are unable to return. In comparison, newcomers are defined as people who either immigrated to Canada for work or were forced to flee due to war or persecution and have been living in Canada for five years or fewer (Wilson et al., 2018).

Organization of Thesis

The first chapter of this thesis reviews process evaluation as it relates to assessing an adapted community resiliency program. The purpose of this process-evaluation is to determine if the program was implemented as planned, reached the intended audience, and was received well by the intended group. The chapter then reviews the literature surrounding refugees’ experiences,
mental health, and interventions. Following this, the M3 program and its adaption are discussed. Chapter two of the paper explains the methodology of the study, and chapter three describes the results and analysis. Finally, chapter four reviews the implementation of the culturally adapted M3 program regarding its successes and limitations.

**Process Evaluation Plan**

Process evaluation is not only crucial when adopting new programs and measuring program success and sustainability (Bowen et al., 2009), but also essential in examining what occurred in the program and how that may impact the program’s eventual outcomes (Saunders et al., 2005). The current study evaluates the implementation of the M3 program with a new population. The purpose is to help assess whether further implementation and investigation of the program would be an effective use of resources in future.

Saunders et al. (2005) offer a guide for process evaluation plans for assessing community intervention. Relevant components of a process evaluation plan are indicated as fidelity, dose (delivered and received), reach, recruitment, and context (Saunders et al., 2005). Fidelity examines if the intervention is executed as planned. The dose delivered accounts for the degree that participants were exposed to the intervention through attendance. The dose received examines the participant’s participation and engagement with the program. Reach assesses if the intervention was able to target the intended participants, whereas recruitment inspects the protocol in obtaining participants. Lastly, context provides an explanation for how external events impacted the intervention. Using the process-evaluation components, a set of questions was created for the M3 program to measure the implementation of the program.

Steps of a process-evaluation include creating questions for each component of the process evaluation specific to the program being evaluated. Next, the information or data needed
to answer each process-evaluation question and the tools needed to get the data, and the timing of the data collection are considered. Finally, the data are synthesized and reported. The process-evaluation plan for M3 is described further in the methods section of this paper.

**Literature Review**

*Refugee Experiences Prior to Immigration*

According to Statistics Canada (2017), in 2016, Canada accepted many Syrian and Iraqi refugees due to extensive civil unrest in their countries. Syrians experienced a civil war in which the government became a violent regime to prevent a civilian uprising (Pearlman, 2020). As a result of these events, Syrian citizens experienced significant violence and devastation; these atrocities were echoed in other Arab countries, including Iraq, their bordering country. Syrian and Iraqi families migrating to Canada primarily consisted of couples and their children, who collectively accounted for 85% of the refugee population (Houle, 2019).

In their home countries, an estimated 75% of refugee families have witnessed significant war-related atrocities due to armed conflict (Atari-Khan et al., 2021). Refugees often have to flee their homes at a moment’s notice to avoid being harmed and or detained and frequently do not have enough time to prepare and gather all their valuable possessions (Acarturk et al., 2018). Even if they escape in time, they are still at risk to be exposed to physical and mental cruelty and abuse in their pre-migration journey, including witnessing the murder of relatives and loved ones and the destruction of their homes and towns (Murray, 2018).

Refugee families typically endure additional adversity before entering the host country. Refugees most often settle in refugee camps in a transit country, a period that can last up to several years (Habib et al., 2019). During this stage, personal safety is not guaranteed. As a result, families are at risk of further victimization, as there is often a lack of law enforcement in
refugee camps (Garsow et al., 2021; Krause, 2020). Moreover, essential items such as food and water are not always available, and refugees may be compelled to compete with one another, sometimes violently, for these necessary resources (Farhat et al., 2018).

In transit countries, many refugee children go through certain adversities and traumatic experiences in refugee camps (Farhat et al., 2018). Children are usually not schooled in most transit countries, as schools are typically not open to refugees (Habib et al., 2019). Instead, children who are ten years and older are likely to work manual jobs to support their families, but children as young as seven years old may also be working odd jobs (Habib et al., 2019). As a result, many refugee children have never attended any formal education system. Those children “fortunate” enough to attend school in transit countries are frequently bullied for their marginalized status. These children may receive little academic support from their teachers, who may not want to exert effort on temporary students (Samara et al., 2020; Schachner et al., 2018). In turn, children’s marginalized status can later impact their post-migration academic success and social well-being at school and home.

As a result of repeated traumatic experiences, refugee children and families endure extreme strain and pressure prior to their arrival in Canada. These negative experiences add a layer of complication when they are unresolved; in other words, they can significantly impact the mental health and well-being of refugee parents and children (Patel et al., 2016; Browne et al., 2021). Consequently, these painful memories can also affect the family dynamic as children and parents use maladaptive survival mechanisms to cope (Bryant et al., 2018). This maladaptive coping mechanism can hinder the recovery process and disrupt family cohesion. Therefore, upon arrival in the host country, refugees are already dealing with multiple challenges unrelated to the everyday struggles of being in a new country.
Refugee Experiences upon Immigration

Alongside ongoing trauma and mental health challenges that arise from living in and fleeing from a conflict zone, refugee families must deal with integrating into a new culture and language. Language and cultural barriers can be added stressors for refugee parents (Cleary et al., 2019; Ghumman et al., 2016). These barriers are taxing on a parent’s mental resources. They require extreme effort to navigate a new system without available or appropriate resources, such as the English language skills needed to communicate (Merry et al., 2017). These integration barriers may further impede a parent’s ability to regulate their thoughts, emotions, and behaviours successfully and, in turn, support their children’s emotional and behavioural self-regulation and adjustment (Huntley et al., 2021).

Comparably, children are also dealing with immigration challenges in their new country. They must cope with their past trauma while being in a new school and social environment that differs vastly from their homeland (Samara et al., 2020). Children tend to acquire language faster than their parents, which may lead to parents requiring them to take on more responsibilities at a young age (Paradis et al., 2020). For example, children may be asked to translate and assist their parents in completing necessary forms or speaking with health care providers and teachers. For refugees, the family has left an environment in which extended family, such as aunts, uncles, cousins, and grandparents, would have been available to assist with looking after children, especially younger ones. This, by itself, would make life harder for people used to helping and being helped by extended family. The effect is amplified in the situation of refugees dealing with all these other stresses, as previously mentioned. Due to a lack of family support from extended family members, older children are frequently given the role of caring for their younger siblings in school and home as parents may be too overwhelmed to support all the children at once. These
new roles for children can create a role reversal that can impact family dynamics, as children inadvertently gain more responsibilities for the family (Dalgaard & Montgomery, 2017). Overall, these added duties that children may need to perform upon immigration add to the already existing pre- and post-migration challenges for the family.

**The Mental Health and Well-being of Refugee Parents and Children and the Impact on Parenting and the Family**

**Refugee Parents.** The mental health issues of adult refugees are well documented (Ghumman et al., 2016). Adult refugees’ most common mental health diagnoses are PTSD, major depression, generalized anxiety, panic disorder, and adjustment disorders (Hodes et al., 2018). A recent study from the Longitudinal Survey of Immigrants to Canada (2017) found that self-reported emotional problems were significantly higher for lone parents and two-parent families than for non-parent adults, even after controlling for ethnicity, age, gender, social-economic status, and immigrant category (Browne et al., 2017). PTSD is common among refugees because of their experiences with social upheaval, witnessing or experiencing violence, loss of loved ones, sexual violence, fear or lack of safety, and resource insecurity (Bryant et al., 2018). Common symptoms of PTSD, including recurring flashbacks, nightmares, depersonalization, and anxiety, can lead to further problems for new refugees, such as physical health complications and further mental health outcomes such as depression and other anxiety disorders (Browne et al., 2017).

Alongside PTSD, newcomer parents are likely to experience chronic stress related to settlement challenges (Patel et al., 2016). For many refugee parents, long-standing mental health issues are likely experienced due to cumulative stress involving previous trauma and ongoing distress and current trauma post-migration (Bryant et al., 2018). Examples of the cumulative
stressors that refugee parents experience beyond the migration journey include discrimination, racism, unemployment, and inequalities in accessing mental health care within their destination country (Browne et al., 2018). Other stressors involve learning a new language and navigating a system they have no known previous experience with. These cumulative experiences can place them at a greater risk of developing mental health disorders (Browne et al., 2017; Hodes et al., 2018). Brown et al. (2017) found that Arab immigrants report more complex emotional problems than white immigrants due to challenges associated with being a visible minority in their post-migration country. Therefore, there is a need for culturally and linguistically meaningful services for newcomer families to better understand and support their trauma experience and respond in a way that builds family resiliency. Upon newcomers’ arrival to Canada, the general focus is to support physical and essential needs through income and necessities. However, newcomer parents can be overwhelmed with the responsibilities of navigating the system while caring for their children simultaneously.

Additionally, being in a new environment without connecting with people from your community can be lonely and an added barrier and challenge for adult parents (Pejic et al., 2016). They may not interact with people who do not speak Arabic, leading them to self-isolate more often and not engage with the mainstream community (Ashbourne & Baobaid, 2019). This is particularly detrimental for individuals from a collectivistic background as family socialization is essential (Pejic et al., 2017). This isolation can negatively impact their overall well-being because it leads to stigmatization (Browne et al., 2017).

As previously discussed, refugee parents are typically facing a multitude of challenges that require increased support. An added challenge for parents in accessing support, however, is combating stigmatization associated with mental health. Collectivist cultures, including Arab
communities, often stigmatize individuals seeking professional help (Pejic et al., 2016). There is a misconception that individuals accessing mental health or well-being services are “crazy” instead of viewing a mental health problem as an illness that needs treatment (Vermette et al., 2015). Moreover, parents may be hesitant to access or seek mental health support due to fears of judgment and stigmatization from their community and child protection agencies regarding their parenting practices (Ashbourne & Baobaid, 2019). Unfortunately, when parents prolong accessing needed support, they risk developing harmful coping mechanisms and harsher parenting styles (Beiser et al., 2015).

When newcomer parents experience personal mental health issues and family problems, they may not find the professional support they need because of the limited availability of services in their first language and/or limited counsellors from a similar cultural background (Hadfield et al., 2017). There are very few Arabic-speaking counsellors in Canada; hence, these parents may have experience with only counsellors who do not speak Arabic and do not understand their cultural context, so they may not be sensitive to their cultural values (Tribe et al., 2019). This lack of cultural sensitivity can create a problem when parents seek help, as newcomers are less likely to trust counsellors or group intervention facilitators who do not understand their culture or values (Tribe et al., 2019).

It is crucial to normalize seeking support for newcomer parents to encourage them to access care. Services that provide opportunities for socialization with other parents have been associated with greater engagement and high completion rates of the program (Miller et al., 2020). A group program provides an opportunity for socialization for parents, which can increase their well-being and supports in the community. When parents’ well-being is high, they can better help their children and develop and maintain healthy parenting styles (El-Khani et al.,
Thus, incorporating intervention supports such as group programming can benefit newcomer parents as they are likely to continue with services and build rapport with counsellors and other group members (Hook et al., 2013).

While parents may be pleased with their children’s integration into the wider community, they may also worry about their children forgetting cultural traditions and beliefs. Additionally, these conflicting beliefs can be an added stressor for parents, provoking them to use stricter forms of parenting and even physical punishment (Miller et al., 2020). Thus, cultural, and linguistic parenting programs can improve communication between parents and children, leading to a more positive family relationship (Huntley et al., 2021).

Refugee parents’ stressful experiences can impact their ability to effectively support their children’s psychosocial development (Sim et al., 2018; Stewart et al., 2015). A study examining the experience of Syrian refugees in Lebanon reported that parents described considerable signs of distress among themselves, despite experiencing a short immigration journey to a neighbouring country (Miller et al., 2020). Moreover, chronic stress resulting from war and daily stressors is predicted to impact parenting ability (Bryant et al., 2018). Parents are more likely to impose harsh discipline on their children, negatively impacting their social-emotional development (Ponguta et al., 2020).

Some of the parents’ mental health difficulties can also be attributed to challenges in the post-migration stage, where financial hardships impact them (O’Donnell et al., 2020). These stressors for parents are linked with impaired parenting behaviour and can result in refugee children being further behind in their emotional, social, and academic development than their Canadian peers and impact their integration process into Canada and overall well-being (Browne et al., 2018; Schachner et al., 2018).
Parenting practices play a significant role in children’s adjustment to war exposure. Eltanamly et al. (2021) conducted a meta-analysis on the impact of parents after children are exposed to war. They found that living in a dangerous environment, parents were harsher, more hostile, more inconsistent, and showed less warmth towards their children than when they were not living in a hazardous environment. Parents only displayed overprotective behaviour when living under immediate threat (Eltanamly et al., 2021). Clearly, there are many cumulative factors and various pathways that link refugee parent stressors and trauma to decreased effective parenting and support for their children. Therefore, providing tailored parenting support for families at this stage of their refugee journey could have significant benefits for both refugee children and their parents (Fazel & Betancourt, 2018).

**Refugee Children.** Refugee children have an increased prevalence of psychological disorders, and children account for most of the world’s refugees (Gillespie et al., 2021). In 2019, Arabic refugee children aged zero to 14 accounted for 42% of the Arabic refugee population, as these families have a larger child population than any other refugee population entering Canada (Houle, 2019). Like their parents, children experience mental health difficulties associated with trauma before entering Canada (Hadfield et al., 2017). The incidence of PTSD, depression and anxiety are 53%, 33% and 32% among the refugee children population, respectively (Schachner et al., 2018).

Schachner et al. (2018) recently reviewed protective and risk factors contributing to refugee children’s mental health. They reviewed current evidence (2010-2020) from 24 high-quality studies and found that pre-migration trauma increases an individual’s risk of developing mental health disorders. Parents experiencing mental health challenges or exhibiting negative
parenting styles were also risks for a child. However, family cohesion was a protective factor. In post-migration, children’s community plays a role in their overall mental health. Children attending school, connecting with peers, and integrating into their host community were all protective factors. However, if children faced discrimination or acculturation stress that can negatively impact their well-being (Browne et al., 2018; Schachner et al., 2018).

As a result of traumatic experiences, refugee children are more likely to have challenges with self-regulation and controlling their behaviour and emotions (Khamis, 2019). Children may also develop maladaptive coping mechanisms to manage the psychological aftereffects of the atrocities (Beiser et al., 2015). These self-regulation difficulties can often manifest themselves as externalizing behaviours and withdrawal from family and school. For example, one study found that, at school, teachers reported significant misbehaviour in refugee children compared to non-refugee children, resulting in higher rates of suspension, further hindering academic and social development (Samara et al., 2020). These challenges are further complicated when considering pre-existing mental health concerns of children and parents due to trauma. Therefore, both pre-migration and post-migration factors can lead to refugee children being further behind in their emotional, social, and academic development compared to their Canadian peers and impacting their integration process into Canada and overall well-being (Browne et al., 2018; Schachner et al., 2018).

**Family Relationships.** Refugee families from a collectivistic cultural background function as a family unit (Pejic et al., 2016). The emphasis is focused on the family’s well-being rather than the individual member. In this context, every individual in the family has specific roles and duties (Dalgaard & Montgomery, 2017). For example, the parents are responsible for
providing income, food, shelter, moral guidance, and discipline; children are accountable for following the parents’ rules, going to school, and being healthy.

When children have added responsibility, this may shift the family dynamic and create a role reversal. Children being “parentified” in this way could also lead parents to feel that children are gradually supplanting their parents’ role as a family authority figure, thus, undermining parental guidance and control (Dalgaard & Montgomery, 2017). This can lead to parents feeling that their parental authority is compromised, and the children are given more authority. This change in family relationships, and the mental health needs of both parents and the children can create layers of challenges that can negatively affect the whole family. This can escalate familial conflicts and create more tension in family relationships, leading to a more significant lack of family cohesion and risk of family violence (Ashbourne & Baobaid, 2019).

There are several situations that refugee families encounter throughout their pre- and post-migration journey that often disrupt the family dynamic and impact the parenting style of refugee parents. These issues can include isolation, acculturation challenges, and not having access to supports, such as family, in their new social system (Dalgaard & Montgomery, 2017). As a result of the hardship that refugee parents face, they often experience difficulties in managing their emotions and their children’s emotional well-being (Eltanamly et al., 2021). As challenges accumulate, and relationships and attachments between children and parents can deteriorate.

One study completed a randomized controlled trial with 106 mother-child dyads to measure the impact of a mother-child program. The program aimed to teach skills to parents to reduce parental stress and harsh parenting styles among refugee families (Ponguta et al., 2020). They found that intervention helped mothers improve their parenting as they reported
experiencing less stress and using a warmer parenting style, in turn creating a healthier family
dynamic. Sims et al. (2018) found that parents during war times are more likely to practice
harsher parenting styles. However, intervention during difficult times increases parents’ ability to
use warm parenting.

Interventions for newcomer families which support the parenting role teach self-
regulation, mindfulness, and grounding skills. Interventions should build strength within family
relationships; through gratitude, kindness, and optimism, parents and children’s mindfulness
strategies can alleviate some of their stress and decrease family dysfunction (Smit et al., 2018).
Parents can feel more competent in responding to their children’s strong emotions, fostering a
healthier relationship. Having a healthier relationship between newcomer parents and children
will help them overcome challenges that could impact their integration into Canadian society.
Clearly, there is a significant need for refugee immigrant families to access support, especially
for their mental health and family well-being.

*Interventions with Refugee Families*

The literature highlights a holistic and intersectionality framework for intervention with
newcomer families (Pejic et al., 2017). It is necessary to consider the cultural context of
collectivist families to ensure the effectiveness of any intervention strategy. One way to consider
the cultural aspect in this regard is to develop a culturally integrative service that involves
community agencies (Ashbourne & Baobaid, 2019). In a recent study, a parenting intervention
that was culturally adapted prevented child maltreatment and improved parent and child mental
health among Syrian refugees in Lebanon (Sim et al., 2021). The researchers highlighted that
intervention with refugees should target parenting practices to support the well-being of both
parents and children. There is a significant identifiable risk for refugee children’s mental health
as their socio-emotional development is impacted due to trauma. There is a need to create an intervention that can support their social-emotional learning to facilitate acculturation (Eruyar et al., 2018; d’Abreu et al., 2019).

Moreover, Timshel et al. (2017) emphasized the need to review risk and protective factors for family violence when completing interventions with the newcomer population, to prevent harm and increase intervention success. Specifically, Timshel et al. (2017) identified the following risk factors for violence: parental trauma experiences, mental illness, history of child abuse, parent-child interaction, family structure, family acculturation, stress, and low socioeconomic status. The authors noted protective factors against family violence are linked to positive parental coping strategies. Another consideration is for interventions targeting newcomers to work with the whole family, not only one family member (Ashbourne & Baobaid, 2019; Isakson et al., 2015).

Furthermore, a family-based intervention targeting parents’ mental health and parenting-related stress can improve children’s emotional and behavioural problems (Eruyar et al., 2018). As Syrian parents, mental health can influence children’s emotional and behavioural problems when controlling for trauma. However, social support and resiliency factors play a role in refugee children’s ability to regulate their emotions during resettlement (Elsayed et al., 2019). For example, El-Khani et al. (2021) culturally adapted the Strong Families program, which is a three-week parenting program that builds on parents’ pre-existing strengths and teaches techniques to deal with caregiver stress. The researchers reported significant alleviation of parental stress (El-Khani et al., 2021). It is essential to develop programs that target issues relating to supporting the family’s psychological health. The literature supports using a holistic approach that includes family-based mindfulness interventions for newcomers (Eruyar et al., 2018).
Refugees on average have a greater need for mental health support to integrate and cope with adversity in comparison to non-refugees (Sangalang et al., 2019).

There are few family-based interventions, but these programs provide both children and parents with skills to communicate and regulate emotions before family breakdowns occur (Smeekes et al., 2017). One avenue to explore in supporting families is using a mindfulness program. There is a need to develop and evaluate family-based mindfulness programs with families. Thus, M3 will benefit newcomer families as it addresses both recommendations for involving the family and delivering mindful awareness interventions. M3 may strengthen and build resilience for refugee children and parents, which may then help cultivate a sense of family cohesion and unity.

**Mindfulness-Based Intervention with Refugees**

Pre-existing mental health concerns that parents may have developed due to trauma, including PTSD, can impact parents’ ability to care for their children and appropriately respond to their children’s needs (Eltanamly et al., 2021). According to the literature, parenting intervention with refugee parents can effectively improve parental and familial mental health (Gilespie et al., 2021). A systematic review of parental programs found that skills-based programs are the most effective for refugee parents (Gilespie et al., 2021). Thus, mindfulness programs which incorporate skills-based programs are shown to be effective.

Mindfulness is a growing area of interest in research for alleviating stress, anxiety, and other mental health concerns (Omidi & Zargar, 2015). Mindfulness and mindful awareness are used interchangeably in the literature; however, they have slightly different meanings. Mindfulness involves formal meditation practices such as yoga to clear one’s mind of thoughts and focus on the present moment. In comparison, mindful awareness involves the informal
practice of being in the present moment and paying attention to what is happening in a non-judgemental way (Kalmanowitz & Ho, 2017). The purpose of mindful awareness is to respond to challenging situations rather than to react to them.

A meta-analysis was conducted, and researchers concluded that mindfulness-based interventions were associated with increased self-regulation (Kallapriran et al., 2015), as individuals practicing mindfulness developed better coping strategies to deal with stress, anxiety, and depression (Perry-Parish et al., 2016). Overall, the practice of mindfulness has been found to be associated with greater psychological functioning and mental health outcomes (Zoogman et al., 2014). The benefits of mindfulness are greater when both parents and children are involved in the interventions (Perry-Parish et al., 2016). Furthermore, parents and children who experience high levels of stress show a significant decrease in stress following a mindfulness intervention (Burgdorf et al., 2019).

Research supports that mindfulness strategies are effective at improving mental health and fostering resilience among refugees. Kalmanowitz and Ho (2016) used an intervention with adult refugees that combined mindfulness and art therapy. They found that teaching adult refugees mindfulness helps increase participants’ safety strategies and resilience. In the study, participants were involved with a non-government organization that provides psychological support for individuals experiencing extreme physiological symptoms due to trauma (Kalmanowitz & Ho, 2016). Researchers noted the importance of including a holistic approach when working with refugees, incorporating their cultural values in the intervention. Mindfulness can be helpful as it addresses different aspects of the individual experience, cultures, and social context for refugees living with extreme trauma (Kalmanowitz & Ho, 2017). Specifically,
participants expressed that mindfulness skills are helpful in times of difficulty (Kalmanowitz & Ho, 2017).

Consistently, mindfulness techniques that include loving-kindness increase emotional flexibility and form new adaptive processing that improves emotional regulation (Hinton et al., 2013). Furthermore, mindful awareness concepts that incorporate positive affirmations can alleviate symptoms of PTSD and sleep disorders in Syrian refugee children (Kubitary & Alsaleh, 2018). Overall, there is research to suggest that mindfulness methods can improve psychological functioning among refugee populations.

The Making Mindfulness Matter Program

The Making Mindfulness Matter (M3) program is an eight-week, mindfulness-based community program for children (aged 4-10 years) and their parents (Bax & Wells, 2020). The program is loosely based on an evidence-based school mindfulness program, MindUP (Maloney et al., 2016). It incorporates mindfulness, social-emotional learning, positive psychology, and neuroscience (Bax & Wells, 2020). The objective of the M3 program is to teach resiliency to families. At the start of the COVID-19 pandemic, the M3 program was adapted for delivery in a live-online format. Throughout the program, facilitators teach parents and children how to incorporate mindfulness in their everyday lives, especially when experiencing difficult emotions or situations. It incorporates mindful awareness, which is defined as being in the present moment and paying attention to what is happening at the moment in a non-judgmental way (Kalmanowitz & Ho, 2017).

To start, parents and children learn about the different brain regions that are involved when an individual experiences stress. For instance, M3 teaches parents that when they experience strong emotions (i.e., fear, frustration, and anger) related to their child’s behaviour,
these emotions are attributed to their amygdala (or guard dog) being activated (Bax & Wells, 2020). Then parents and children learn skills to deal with stress, such as breathing techniques, mind breaks, mindful sensing, and mindful movement. Learning about the brain under stress can be helpful for families who have experienced traumatic events because it can help them understand why they may be reacting in a distressed way, even when they are no longer in danger. For example, a child might have a hard time going to sleep for fear of unexpected loud noises, as they may have nightmares connected to witnessing war-related violence and decide to stay up later to prevent themselves from being frightened (Harb & Schultz, 2020). However, the parent might view this situation as the child not listening to them and choosing to stay up later for no reason. Hence, the parent and the child learning how their brain works under stress can help them communicate their needs in these heightened situations to increase healthier parent-child attachment.

Parents and children are taught that practicing mindful awareness skills can create a gap between reacting to our thoughts or feelings, so we can choose to respond instead. Further, parents are taught the concepts and skills of the program within a “learn, practice, teach” model. First, parents learn the concepts, then practice them for themselves to both experience the techniques but also benefit from being calmer and more in control of their thoughts and feelings, and then they teach them to their children when the children experience a strong emotion. A more detailed outline of the M3 program content is provided in Table 1.
### Table 1

**M3 Session Objectives (Bax & Wells, 2020).**

<table>
<thead>
<tr>
<th>Session</th>
<th>Objective</th>
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<tbody>
<tr>
<td>1. An Introduction to Breathing, the Brain and Mindfulness</td>
<td>The focus of session one is building a comfortable environment and introducing main concepts such as how the brain and our thoughts and feelings work together, mindful awareness, and deep breathing. Parents also learn about neuroplasticity and the STOP model of mindful parenting.</td>
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<td>2. How Our Brain Works Under Stress</td>
<td>Session two teaches how the brain works under stress. Children and parents learn to further identify which part of their brain is busy when they feel big emotions and how mindfulness and a brain break can calm their amygdala, so they can choose to respond rather than react to stressful situations.</td>
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<tr>
<td>3. Mindful Awareness</td>
<td>The concept of mindfulness is further explored in session three, with children learning what is mindful or unmindful thinking and practicing how to be in the present moment. Parents learn about the effects of breathing on the brain and body and learn mindful techniques to use with their children.</td>
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<tr>
<td>4. Mindful Sensing</td>
<td>Further practice at being in the moment, through Mindful Sensing, is the focus of session four. Both parents and children participate in a variety of activities using the five senses mindfully.</td>
</tr>
<tr>
<td>5. Mindful Movement</td>
<td>Mindful movement is the topic of session five. Parents learn about the brain-body connection; and mindful awareness of their body and their children’s body during parent-child interactions. Children also learn mindful awareness of their body, including how good posture relates to good thinking.</td>
</tr>
<tr>
<td>6. Perspective Taking</td>
<td>Both parents and children learn how perspective-taking is a skill they can practice and strengthen through mindful awareness. Parents explore their child’s perspective through imagining their child is video recording all interactions and using that to understand how they should act in similar situations. Children learn perspective-taking through games, books, and videos.</td>
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<tr>
<td>7. Choosing Optimism and Appreciating Happy Experiences</td>
<td>Choosing optimism and appreciating happy experiences are the focal points of session seven, with parents discovering that optimism can be learned and three techniques to be a more optimistic parent. Children learn about positive and negative thinking, how it affects how we feel, and how we think more positively, and have a growth mindset.</td>
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<tr>
<td>8. Expressing Gratitude and Acts of Kindness</td>
<td>Using mindful awareness to practice gratitude and kindness are explored, with children participating in activities that encourage being thankful and doing acts of kindness for those around them. Parents similarly learn how gratitude and kindness are linked to better mental health and stronger family relationships and that kindness starts with being kind to ourselves.</td>
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</table>
The M3 program includes a manual with planned content and activities for each session topic. Parents and children are taught the same concepts each week. In the beginning, families learn about the brain regions associated with stress and strong emotions. M3 teaches families coping strategies such as breathing techniques, mindful sensing, and movement to help with self-regulate. In the last two sessions of the program, families learn concepts related to social-emotional learning, such as perspective-taking and choosing gratitude and kindness. The M3 session overview can be seen in Table 2.

Facilitators attend a two-day training on delivering the M3 program. Halfway through the program, facilitators had a “booster” session with a trainer to ensure a review of core concepts related to the program and to problem solve any issues. Families were also provided resource cards to take home to further reinforce the concepts between parent and child and their use outside of the program setting.

The M3 program has been implemented with diverse populations such as families in crisis, poverty, and children with health conditions. In families that have experienced adversities, preliminary pre-post findings of M3 demonstrate a decrease in caregivers’ report of parenting stress and an increase in caregiver reported self-regulation in children (Bax et al., 2021; Pacholec, 2020; Mueller, 2021). Thus, given the need for family interventions for new refugees, the M3 program was adapted for Arabic-speaking refugees in partnership with the community agency.
<table>
<thead>
<tr>
<th>Session</th>
<th>Parent Group</th>
<th>Child Group</th>
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<tbody>
<tr>
<td>1</td>
<td>An Introduction to the Brain, Breathing &amp; Mindfulness</td>
<td>An Introduction to the Brain, Breathing &amp; Mindfulness</td>
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<td></td>
<td>Content &amp; Activities:</td>
<td>Mindfulness Activities:</td>
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<td></td>
<td>• Introduction to M3, Yarn Activity, and Group Rules</td>
<td>• Check in/ Review</td>
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<td></td>
<td>• Introduction to the STOP Model</td>
<td>• Mind Break</td>
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<td></td>
<td>• Mind Break</td>
<td>• Yoga</td>
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<td></td>
<td>• The Developing Brain/Neuroplasticity</td>
<td>• Brain Lesson: Moving Snowballs</td>
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<td></td>
<td>• Introducing the Three Brain Regions</td>
<td>• Book</td>
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<td></td>
<td>• Bringing it Back to Parenting/ Journal 1</td>
<td>• Table or Group Activity: What is on your Mind?</td>
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<td></td>
<td>• Distribute and discuss M3 Kit</td>
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<td>2</td>
<td>How Our Brains Work Under Stress</td>
<td>How Our Brains Work Under Stress</td>
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<td>Content &amp; Activities:</td>
<td>Mindfulness Activities:</td>
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<td>• Mind Break</td>
<td>• Check in/Review</td>
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<td></td>
<td>• Discuss Parent Journal</td>
<td>• Mind Break</td>
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<td></td>
<td>• Review Brain Regions</td>
<td>• Yoga</td>
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<td></td>
<td>• The Stress Response</td>
<td>• Brain Lesson: Parts of the Brain/Flipping Your Lid</td>
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<td>• Flipping Your Lid: Hand Model of the Brain</td>
<td>• Book</td>
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<td>• Amygdala Shake-Up</td>
<td>• Group Activity: Which part of my Brain is Busy?/ Let’s Vote</td>
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<td>• Bringing it Back to Parenting</td>
<td>• Brain Game: Mindful Tag/Table Activity: Amygdala Jar</td>
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<td>• STOP Model</td>
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<td>3</td>
<td>Mindful Awareness &amp; Mindful Breathing</td>
<td>Mindful Awareness &amp; Mindful Breathing</td>
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<td>Content &amp; Activities:</td>
<td>Mindfulness Activities:</td>
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<td>• Mind Break</td>
<td>• Check in/ Review</td>
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<td></td>
<td>• Discuss Parent Journal</td>
<td>• Mind Break</td>
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<td></td>
<td>• What is Mindful Awareness (Read Mindful Monkey, Happy Panda)</td>
<td>• Yoga</td>
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<td></td>
<td>• Formal/Informal Mindfulness</td>
<td>• Brain Lesson: Mindfulness and the Brain</td>
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<td>• Why Mindful Awareness? (Just Breathe video)</td>
<td>• Book</td>
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<td>• Brain Game: Mindful/ Unmindful</td>
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<td>Mindful Sensing</td>
<td>Mindful Sensing</td>
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<td>Content &amp; Activities:</td>
<td>Mindfulness Activities:</td>
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<td>Mind Break</td>
<td>Check in/Review</td>
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<td></td>
<td>Discuss Parent Journal</td>
<td>Mind Break</td>
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<td></td>
<td>Mindful Awareness in Parenting Scenarios</td>
<td>Yoga</td>
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<td></td>
<td>Mindful Sensing Activities (Tasting, Listening, and</td>
<td>Very Hungry Caterpillar</td>
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<td>Smelling)</td>
<td>Brain Lesson: Exploring our Senses</td>
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<td>Bringing it Back to Parenting</td>
<td>Table or Group Activity: Sense Stations</td>
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<td>STOP Model</td>
<td>Book</td>
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<td>Brain Game: Telephone</td>
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<th>Mindful Movement</th>
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<td>Content &amp; Activities:</td>
<td>Mindfulness Activities:</td>
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<td>Check in/Review</td>
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<td></td>
<td>Discuss Parent Journal</td>
<td>Mind Break</td>
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<td>Mindful Awareness of the Body</td>
<td>Yoga</td>
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<td></td>
<td>Breath &amp; Body as Anchors</td>
<td>Brain Lesson: Active/Calm Bodies</td>
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<td></td>
<td>Body Scan Meditation or Progressive Muscle Relaxation</td>
<td>Table or Group Activity: Choose at least 2 from the list</td>
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<td></td>
<td>Exercise</td>
<td>Book</td>
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<td>Journal: Heart Rate</td>
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<td>Content &amp; Activities:</td>
<td>Mindfulness Activities:</td>
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<td>Discuss Parent Journal</td>
<td>Mind Break</td>
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<td></td>
<td>Understanding Perspectives</td>
<td>Yoga</td>
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<td>Taking Perspective</td>
<td>Brain Lesson: Perspective Taking with Feelings</td>
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<td>Why this child? Why now?</td>
<td>Table or Group Activity: Perspective Taking Practice</td>
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<td>Parenting Double Take</td>
<td>Book/Video</td>
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<td>7</td>
<td>Choosing Optimism &amp; Appreciating Happy Experiences</td>
<td>Choosing Optimism &amp; Appreciating Happy Experiences</td>
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<td>Content &amp; Activities:</td>
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<td>• Discuss Parent Journal</td>
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<td>• Optimism &amp; the Brain’s Response to being Optimistic</td>
<td>• Yoga</td>
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<td>• Choosing Optimism Strategies 1-3</td>
<td>• Brain Lesson: Turn Around Game/ Optimism vs Pessimism</td>
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<td>• Happiness and the brain</td>
<td>• Table or Group Activity: Thank a Farmer/Happy Memory</td>
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<td>• Happy Memory Movie Activity</td>
<td>• Book</td>
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<tr>
<td>• Bringing it Back to Parenting</td>
<td>• Brain Game: Shaker of Emotions</td>
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<td>• STOP Model</td>
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<td>• Discuss Parent Journal</td>
<td>• Mind Break</td>
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<tr>
<td>• Kindness, Gratitude and the Brain</td>
<td>• Yoga</td>
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<tr>
<td>• Being Kind to Ourselves</td>
<td>• Brain Lesson: Wrinkles Heart</td>
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<tr>
<td>• Gratitude Video and Family Gratitude Ideas</td>
<td>• Table or Group Activity: Kindness Ripples/Kindness Science Activity</td>
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<tr>
<td>• Bringing it Back to Parenting</td>
<td>• Book: Chrysanthemum</td>
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<tr>
<td>• STOP Model</td>
<td>• Brain Game: The Gratitude Game</td>
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<tr>
<td>• Closing Gratitude Circle</td>
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Cultural Adaptation of the M3 Program

As indicated earlier, the first step of this study was to adapt the existing M3 program for the target population culturally. Cultural adaptation is defined as a process whereby a program is modified to reflect a client’s culture and language context in a meaningful way (Bernal et al., 2009). There is no one correct method; however, the focus is on considering pre-existing evidence about the intervention available for a target population and identifying what intervention principles work best for that population. A general guide to cultural adaptation focuses on ensuring that the intervention is accessible. It also considers the underlying mechanisms and acceptability of the new modifications being delivered suitably for the target population (Bernal et al., 2009).

In the present study, the ecological validity model for culturally adapting programs was followed. The ecological validity model focuses on translating materials into the target population’s language. It also incorporates translations and modifications of other program domains such as metaphors, contents, concepts, context, goals, and methods (Baumann et al., 2015). In this process, we incorporated Arabic videos, graphics, and books.

A deeper level change involves the cultural sensitivity model, which includes a thorough methodological change of the program (Baumann et al., 2015). The cultural sensitivity model was applied following the completion of a process or feasibility study as it is considered a second-order level of adaptation. For example, we found that changing a concept taught in the program to include more hands-on learning works better for Arabic-speaking newcomers. Additionally, incorporating a bottom-up and holistic approach is key to intervention success (Kalmanowitz & Ho, 2016). Furthermore, trauma-focused, family-based, and strength-based elements have proven to be successful for refugee newcomers (Weine, 2011). Notably, cultural
adaptation programs incorporate relevant community stakeholders, examine impacts on the population, and assist community providers in conducting the intervention to enhance program impact (Baumann et al., 2015). Lastly, involving community members in guiding and informing program evaluations increases program success.

For the current study, a partnership was established with the Muslim Resource Centre for Social Support and Integration (MRCSSI) in London, Ontario. MRCSSI is an anti-violence agency specializing in working with newcomer families from conflict zones who identify as Muslim or Arabic speaking. MRCSSI has expertise in delivering and culturally adapting evidence-based programs such as the Strengthening Family Program (SFP) through surface-level changes and translating all materials into Arabic and assisted in the cultural adaptation of the M3 program.

As an author of this paper, my positionality is important to mention. I am an Arabic-speaking Muslim woman who immigrated to Canada as a child. In my personal experiences as a newcomer to Canada, I had to adapt and learn a new language and culture. My personal experience has guided my work experience and research in this study. Before conducting the current study, I worked with MRCSSI as a social support worker helping newcomer families. My familiarity and pre-existing relationship with MRCSSI helped foster this partnership and research with the agency. In addition, my cultural identity and Arabic-speaking fluency allow me to be a cultural liaison when working with families; these helped participants become more comfortable with the study.

Furthermore, I collected and translated data from Arabic to English. However, I acknowledge that my positionality has influenced the project to a certain extent. Nevertheless, I
have included additional coders and external translators to combat any biases that may have occurred. Overall, I believe my identity helped me empathize with refugee families’ experiences.

**Applied Theory of Change Model for Family Well-being and Subsequent M3 Logic Model**

The Applied Theory of Change model (Newland, 2015) examines how factors associated with parenting, directly and indirectly, predict child well-being. This model has been adapted to apply to the M3 program with a focus on the inter-related aspects of family well-being (See Appendix R). This adapted model provides a framework to explain family risk and resilience factors and considers the influence child well-being has on parent well-being and parenting behaviour, leading to many pathways of effecting family-resiliency.

In section one of the model, family well-being is described as family self-sufficiency, parental physical and mental health, and family resiliency factors. It is unrealistic to expect parents to optimally support the family when experiencing a high level of stress. Nevertheless, parents’ health often takes a backseat to the responsibilities of being a parent. For parents to support their children, they must first regulate their emotions before adequately responding to their child’s needs (El-Khani et al., 2018). When parents are under chronic stress, the parent-child relationship is impacted (Newland, 2015). These characteristics are further complicated by reduced family self-sufficiency or parents’ ability to provide basic needs to the family. Family self-sufficiency is linked to parents’ education, employment, and financial resources. Family resiliency is an essential component for family well-being, as understanding the family’s strengths can enhance intervention outcomes.

Section two of the model discusses the role of developmental parenting, which evaluates positive parenting attributes (Newland, 2015). It examines parents’ ability to be affectionate and responsive, and engage with their children, use positive discipline, and co-parent in their
parenting. Developmental parenting indirectly impacts child well-being as positive parenting practices can influence a child’s perceptions of themselves (Newland, 2015). In turn, having a positive outlook is associated with greater happiness and social and cognitive success in children (Anderson, 2018).

As indicated above, the applied theory of change model for child well-being has been adapted for the M3 program. The model has been amended to account for the reciprocal nature of parent-child relationships and its impact on family well-being. The applied theory of change model considers the family paradigm of Arabic-speaking refugees, who value interdependence and for whom individual well-being is contingent upon the family’s well-being. Therefore, this model considers how child and parent well-being influences each other.

In keeping with the proposed theoretical model of family resiliency, the following logic model of M3 for Arabic-speaking refugees is provided. As the M3 program aims to provide parents and children with tools to cope with their strong emotions, it is expected that parents and children's stress levels would decrease after attending the program. This is a result of the development of skills, including better methods to cope and communicate with each other. Thus, it is expected that M3 would improve the overall mental health of refugee children and parents and increase family resiliency.
Table 3
*M3 Program Logic Model for Family Resiliency*

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<thead>
<tr>
<th>Inputs</th>
<th>Immediate Impacts</th>
<th>Short-term Impacts</th>
<th>Behavioural Impacts</th>
<th>Well-being/ Resiliency Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide training, manual, materials to facilitators will</td>
<td>result in facilitators running the M3 program to Arabic speaking refugee families, which will</td>
<td>result in changes to how parents and children cope with their strong emotions, how they relate to each other, and more positive parenting practices which</td>
<td>will result in reduced parent and child stress/distress, improved parenting skills, improved self-regulation in children and less conflict in the family, and ultimately</td>
<td>improved child well-being, parent well-being, and overall family resiliency</td>
</tr>
</tbody>
</table>

The Present Study

Given the multitude of distressing and traumatic events of Arabic-speaking refugees’ pre- and post-migration journey and the common negative impact on the parent, child, and family well-being, there is a need for interventions that target the family. The present study describes the cultural adaptation of an established family resiliency program, the M3 program. This study also provides the results of a process-evaluation plan assessing the implementation of the culturally adapted M3 program.

Chapter 2: Methodology

This chapter explains the methodology of this study. The general study design is explained, including the process evaluation plan, followed by a description of the participants and study procedures. Finally, this section concludes with the measures or questionnaires used.
**Study design**

A process evaluation plan was created and then carried out. Process-evaluation is crucial when adapting programs and measuring program success and sustainability for the target population (Saunders et al., 2005). Process evaluation examines what occurs in the program and how that may impact program outcomes (Saunders et al., 2005). Relevant components of the process evaluation plan for the M3 program were fidelity, dose (delivered and received), reach, recruitment, and context (Saunders et al., 2005). For fidelity, researchers examined if the intervention implemented was consistent with the underlying theory. The dose delivered offered data on whether concepts and activities were completed. The dose received measured the participant’s overall engagement and participation in the program. For the reach component, researchers investigated any barriers to participation and the rate of participation. Recruitment was the procedure that researchers used to recruit participants to the program and barriers to recruitment. Lastly, context examined obstacles in implementing the intervention. Descriptive statistics, qualitative thematic analysis and a paired t-test analysis, were used as appropriate to analyze the varying data related to each component of the process evaluation. Assessing process evaluation components aided in measuring M3’s universality with a diverse population (See Table 3). The Western Human Research Ethics team has approved this study, and a copy of the approval is provided in Appendix S.

**Participants**

The original criteria included participants who were Arabic-speaking refugee children (ages 4-10 years) and their parents who have been in Canada for five years or less and have come from conflict zones (i.e., Syria, Iraq, Palestine, and Sudan). However, due to the pandemic and the need to complete this study for the education process, the length of residence in Canada was
expanded to eight years. Participants were recruited from a local Muslim Social Support Center. The inclusion criteria were specified as children ages four to ten and their parents, refugee families who have been in Canada for less than eight years, and the parents’ original language is Arabic. Exclusion criteria consisted of children and parents who cannot attend the program concurrently and children with significant learning or developmental challenges who cannot follow simple instructions.

**Procedure**

**Cultural Adaptation of M3**

The first step in culturally adapting the M3 program involved partnering with a local community agency. The agency was chosen as it is a non-profit agency that has experience providing culturally adapted evidence-based programming for Arabic-speaking newcomers, such as the SFP and the Caring Dads program (Kumpfer et al., 2008). For this study, the M3 program was culturally adapted and facilitated with the expertise of the staff. Based on recommendations from the agency and guided by the Ecological Validity Model of cultural adaptation of programs, the program was translated into Arabic for the parent group. In contrast, the child group remained in English. Based on previous groups delivered at the community agency, staff recommended keeping the program in English for the child group as many children were more comfortable with English than Arabic. However, the staff were bilingual and could clarify concepts in Arabic to the children, if needed.

Additionally, as a result of the war, most children did not receive formal education. Thus, children are likely to understand and be literate in English more than Arabic, especially when discussing concepts of mindfulness. A professional interpreter was hired to translate the facilitator manual for the parent group, which included the parent program PowerPoint slides.
(see Appendix L), the resource booklet (see Appendix M), and the family resource cards (see Appendix N). Some words and concepts in English were not directly translatable to Arabic, such as the “flip to the lid” model. Thus, in discussions with the staff and the translator, terms were changed to be more appropriate and understandable within the Arabic language.

All examples of family scenarios were reviewed, and appropriate contextual pieces of the program were changed. English names were changed to Arabic names, such as Amy changed to Amira. In addition, we replaced most English videos with Arabic videos. For example, the neuroplasticity video was replaced with an Arabic-speaking psychiatrist explaining the term in Arabic, and the progressive muscle relaxation video was changed into one in Arabic. Many of the English videos had closed captions, which were transformed into Arabic subtitles. All the books in the program were in English and available online as an English video. Therefore, facilitators used the closed caption in Arabic and translated and read the books aloud in Arabic to the parents. The “Mindful Monkey Happy Panda” book, which was used in cohorts two and three of the M3 program, was translated into Arabic by one of the facilitators.

**Delivery of the Culturally Adapted M3 Program Intervention**

M3 is an eight-week online program that lasts an hour and a half for the parent group and an hour for the child group. The program was facilitated using Western University Zoom. Parents and children’s groups were not held synchronously (they were held virtually every week on different days of the week); however, parents were invited to complete a mindfulness exercise with their children in the last 10 minutes of the children’s sessions.

MRCSSI staff members referred their clients to the M3 program after informing them about the program (Appendix D), informing them the program was being evaluated, and obtaining consent to share their information with the M3 research team using a standard
telephone script (Appendix E). A research team member then contacted the participants and inquired if the parents and their children were interested in enrolling in the program. Parents were sent the Arabic parent consent form (Appendix B).

Facilitators from MRCSSI attended the two-day standardized M3 training before facilitating the group. They were provided with the appropriate M3 manual and a kit with all tools, PowerPoint slides (See Appendix L), program handouts (See Appendix M), and parenting resources cards (See Appendix N). Facilitators also attended a booster session that occurs halfway through the program to provide feedback about the program. Research assistants were present in every session for the parent and child group to observe participant engagement and fidelity to the program.

Upon consent, participants completed questionnaires pre- and post-participation in the M3 program. Parents were sent a Qualtrics link by email to complete all the study measures, including the Demographic Form (Appendix F) and the Mindful Parenting Self-Assessment (Appendix G). The researcher also set up a Zoom meeting with the children to obtain child assent (Appendix C) and completed the Child Mindfulness Survey (Appendix H).

During the intervention, parents and children completed weekly questionnaires (Appendix I and Appendix J). After each session, facilitators completed the Adherence Checklist Questionnaire with the researcher to examine if the program was effective (Appendix K). Parents and children completed all the post-questionnaires following the intervention except for the demographic form. After completing the intervention of all three cohorts, the researcher sent an email inviting facilitators to participate in the focus group (Appendix P). Upon agreeing to the focus group, facilitators completed a consent form (Appendix O) and then responded to the Focus Group Questions (Appendix Q) questions.
Measures

Parent Measures

Demographic Form (Appendix F). Parents completed a demographic questionnaire before the start of the program. This questionnaire provided relevant demographic information about families, such as participants’ age, sex, length of residence in Canada, and country of origin. This survey was created and used in previous M3 studies with English-speaking families and translated to Arabic for this study with a detailed list of Arabic-speaking countries. Participants' responses in Arabic were translated back to English for analysis.

Mindful Parenting Self-Assessment (Appendix G). This questionnaire assessed parents’ mindful awareness skills by asking parents to complete an 11-item scale rating their agreement with statements using four points Likert scale (1- Never, 2- Sometimes, 3- Often, 4- Regularly). Parents completed this measure before and after the program. An example included, “I practice mindfulness.” This researcher used questionnaires developed for English-speaking families that were found to be sensitive to change over eight weeks. The survey was translated into Arabic for parents to complete. Participants' responses in Arabic were translated back to English for analysis. The measures were used to assess if participants gained knowledge about the M3 concepts, which follows under the dose received component of process evaluation.

Parent Weekly Feedback Questionnaire (Appendix I). Parents completed a weekly questionnaire that evaluated M3, and parents were asked to finish it before and after each session. Parents were asked about what skills they practiced from the previous week, how often they practiced these skills, what factors were attributed to them using the skill, and what skill was helpful. They were also asked about what did not work. This survey was created and used in previous M3 studies with English-speaking families and translated to Arabic for this study.
Participants' responses in Arabic were translated back to English for analysis. A second interpreter was used to code participants’ Arabic responses. A thematic analysis was conducted with open-ended responses. The questionnaire was used to assess if parents practice M3 skills related to the dose received section.

**Child Measures**

**Child Mindfulness Survey (Appendix H).** This questionnaire evaluated children’s knowledge of mindful awareness skills and social-emotional learning; a six-item survey was used with children before and after the intervention. Children rated their agreement with a sentence using a three-point Likert scale that uses face imagery (Yes- smile face, I don’t know-neutral face, and No- sad face). There were five multiple-choice questions and one open-ended question. For instance, an example of a multiple-choice question is, “I know how my brain works when I am angry or upset.” The open-ended question asked the children to define, “what mindfulness is.” This questionnaire was created for this program, and it was based on previous English-speaking M3 studies that were found to be sensitive to change over eight weeks (Bax et al., 2021; Pacholec, 2020; Mueller, 2021). This measure assessed children’s knowledge of M3 concepts and answered questions related to the dose received.

**Child Weekly Feedback Questionnaire (Appendix J).** This weekly feedback examined the program’s effectiveness by asking children whether they practiced any of the mindfulness skills and, if not, what prevented them from practicing. Following the session, children were asked about the program’s content, what skills or activities they found helpful, and what aspect of the program they found not to be beneficial. For example, “What was your favourite thing/activity you learned today? Why?” Children were asked informally, and a researcher documented their responses in a non-identifying manner. There was a total of five open-ended
questions, and it took approximately five minutes to complete. This questionnaire has been used in the previous M3 program and helped to guide revisions to the program. The questionnaire assessed if children practice M3 skills, answering questions related to the dose received section.

**Facilitator Measure**

**Program Adherence Checklist (Appendix K).** Research assistants in both the parent and the child groups completed this observation checklist with facilitators to assess the process evaluation of the M3 program. In the parent groups, the research assistant understood Arabic and observed and recorded all activities conducted in the program and documented if any modifications occurred. Additionally, they took note of participants’ engagement and attendance. Closed-ended questions about the delivery of the session were completed in collaboration with the facilitators. For example, question one asks, “Did you complete the following activities?”

**Focus Group Questions (Appendix Q).** The researchers conducted a focus group with facilitators, investigating the success and challenges of implementing the M3 program with Arabic-speaking newcomers. Facilitators responded to nine open-ended questions in the group related to program delivery, curriculum, and participant engagement. For example, facilitators were asked, “What can be improved when implementing and delivering the M3A program with Arabic-speaking newcomers?” Facilitators’ responses were audio-recorded and transcribed for thematic analysis. The Focus Group Questions provided pertinent information needed to explain the context component.

**Process Evaluation Plan**

This questionnaire measures the fidelity of the program by investigating if facilitators were implementing the activities consistent with program goals.
For fidelity, researchers examined if the intervention implemented was consistent with the underlying theory and as planned. Dose delivered measured whether all important sessions and activities were completed each week according to the structured curriculum.

The dose received measures the participant’s overall engagement and participation through attendance. The facilitators’ feedback on participants’ engagement in activities. Participants and facilitators completed the weekly questionnaires to indicate if they were practicing the skills taught in class, and researchers assessed participants’ attendance.

For the reach component, researchers investigated if there were any barriers to participants and the rate of participation. This included the research assistants weekly checking in on families before and after a session to understand the challenge in attending. Facilitators texted parents a reminder of session times and dates.

Recruitment was the procedure that researchers used to recruit participants to the program and assess barriers to obtaining participants. In collaboration with MRCSSI, the researcher conducted and modified procedures for recruitment based on MRCSSI staff input. Lastly, context examined obstacles in implementing the intervention. Following the completion of the program, we used a focus group to investigate the challenges and limitations of running the M3 program with the Arabic population and developed a solution to improve the program. Therefore, process evaluation components are necessary for measuring M3’s universality with a diverse population (See Table 4).
#### Table 4

**Process Evaluation Plan for the Culturally Adapted version of M3**

<table>
<thead>
<tr>
<th>Component</th>
<th>Process Evaluation Question</th>
<th>Data Source</th>
<th>Tools/Procedures</th>
<th>Specific Item from the Tools/Procedure</th>
<th>Timing of Data Collection</th>
<th>Data Analysis/Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fidelity</strong></td>
<td>To what extent was the intervention implemented consistently with the underlying theory and philosophy?</td>
<td>Research Assistant</td>
<td>Adherence Checklist (Q. 12)</td>
<td>- Child group Q12 - If you made changes, please describe them here, or if you did not complete an activity, please describe why here. Parent Group Q12 - If you made changes, please describe them here, or if you did not complete an activity, please describe why here.</td>
<td>Weekly during each session</td>
<td>Descriptive statistics. A narrative for the reason an activity was not completed</td>
</tr>
<tr>
<td><strong>Dose Delivered</strong></td>
<td>Did all facilitators attend the full training?</td>
<td>Facilitators</td>
<td>Confirmation of Training</td>
<td>1) Q11 Total # of activities competed</td>
<td>At the start of the study</td>
<td>Descriptive statistics</td>
</tr>
<tr>
<td><strong>Dose Received</strong></td>
<td>To what extent were all of the intended tasks and activities completed each week?</td>
<td>Research Assistant</td>
<td>Adherence Checklist (Q. 1)</td>
<td>Weekly during each session</td>
<td>Descriptive statistics. A narrative for the reason an activity was not completed</td>
<td></td>
</tr>
<tr>
<td><strong>Dose Received</strong></td>
<td>To what extent were participants present?</td>
<td>Attendance for Parent and Child</td>
<td>Attendance Sheet</td>
<td>Weekly</td>
<td>Percentage attending 5+ sessions</td>
<td></td>
</tr>
<tr>
<td><strong>Dose Received</strong></td>
<td>To what extent did parents and/or children use the skills at home?</td>
<td>Parents and children</td>
<td>1)Parent Weekly Feedback (Pre, Q. 1-3)</td>
<td>2) Child informal Q1 - Did you practice since last week's session?</td>
<td>Weekly</td>
<td>Descriptive statistics. Qualitative analysis of themes</td>
</tr>
<tr>
<td>Component</td>
<td>Process Evaluation Question</td>
<td>Data Source</td>
<td>Tools/Procedures</td>
<td>Specific Item from the Tools/Procedure</td>
<td>Timing of Data Collection</td>
<td>Data Analysis/Synthesis</td>
</tr>
<tr>
<td>----------------------------------------</td>
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<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
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<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Overall engagement and participation</td>
<td>Who was engaged and active during the sessions?</td>
<td>Parents, children, facilitator, and research assistant</td>
<td>1) Parent Weekly (Post) Feedback Questionnaire (Q. 1 &amp; 3)</td>
<td>1a) What information/skills discussed today do you think will be helpful for you as a parent? Why? - mark if not engaged 1b) Were there any parts of the session that you found confusing? Why? (E.g., not enough time, difficult concept).</td>
<td></td>
<td></td>
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<tr>
<td>of participants</td>
<td></td>
<td></td>
<td>2) Child Adherence checklist Q3</td>
<td>2) Which activities did the participants not seem engaged in and why?</td>
<td></td>
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</tr>
<tr>
<td>Did the participants gain knowledge</td>
<td>Who learned new concepts and skills?</td>
<td>Parents and children</td>
<td>3) Adherence checklist (Q 13_2)</td>
<td>3) How would you rate your overall satisfaction with: - The interaction and engagement of the participants</td>
<td></td>
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<tr>
<td>about the M3 concepts and skills?</td>
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<tr>
<td>Recruitment</td>
<td>What procedures were used to recruit participants and program facilitators?</td>
<td>Research Assistant, Program Facilitator, and Participants</td>
<td>Monitor and document participation and adjust as needed</td>
<td>1) Child Total score 2) Parent Total score</td>
<td>Before the start of the program and upon completion of the program</td>
<td>Statistical Analysis (T-test-composite score of all items)</td>
</tr>
<tr>
<td>Reach</td>
<td>What are the rates of participation and barriers to participation?</td>
<td>Research Team and Community Partner</td>
<td>Monitor and document recruitment as per the procedure</td>
<td></td>
<td>Weekly</td>
<td>Narrative</td>
</tr>
<tr>
<td>Context</td>
<td>What are the barriers and facilitators to implementing M3-A?</td>
<td>Facilitators and Community Agency personnel</td>
<td>Focus Group Question (3, 4 and 5)</td>
<td>1) What were barriers to referring, recruiting, and enrolling Arabic newcomer families? 2) What were the barriers to maintaining the involvement of families? 3) What factors in the organization, community, social/political context, or other</td>
<td>At the end of the program</td>
<td>Themes identified for qualitative analysis</td>
</tr>
<tr>
<td>Component</td>
<td>Process Evaluation Question</td>
<td>Data Source</td>
<td>Tools/Procedures</td>
<td>Specific Item from the Tools/Procedure</td>
<td>Timing of Data Collection</td>
<td>Data Analysis/Synthesis</td>
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<td>situational issues potentially affect</td>
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<td></td>
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<td>Arabic-speaking newcomer families from</td>
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<td></td>
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<td></td>
<td></td>
<td>attending and or participating in the</td>
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<td></td>
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<td></td>
<td>program?</td>
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</table>
**Statistical Analysis**

As indicated in the process evaluation plan for this study, data synthesis was completed using a variety of analyses, dependent on the process evaluation question being asked and the nature of the resulting data (descriptive, narrative, qualitative or quantitative). Then, the data analyzed to answer each process evaluation questions were synthesized to lead to the resulting answer. For example, to evaluate the fidelity of the program, two questions were asked. One of those questions was: *To what extent was the intervention implemented consistently and with the underlying theory and philosophy?* The Adherence Checklist provided both descriptive statistics to answer that question and qualitative answers regarding if the program deviated from the expected adherence. The second question regarding fidelity asked if all facilitators had attended the two-day M3 training. The resulting descriptive statistic and the results of the previous questions were then synthesized to determine overall program fidelity.

Parents were able to answer narrative questions on some of the forms in Arabic. One research associate translated these answers into English which a second translator verified. If there was a discrepancy in the translations, a third translator was asked to determine the final translation of that item.

Thematic qualitative analysis was completed on both parents and facilitators’ feedback about participants’ engagement and participation. The purpose of thematic qualitative analysis is to determine a pattern in qualitative data (Braun & Clarke, 2006). An inductive approach for this paper was used, whereby codes and themes were directly taken from the data without a predetermined framework. A surface-level analysis was conducted with the themes where codes used apparent labels. A deeper analysis was not examined into participants’ responses as participants' feedback was clear and concise.
The qualitative thematic analysis involved several phases as outlined by Braun & Clarke (2006): familiarize yourself with your data (i.e., compile the data into one document), generate initial codes, search for themes, review themes, define and name themes, and produce the report (Braun & Clarke, 2006). Table 5 discusses each of these phases in greater detail.

In following Braun & Clarke (2006), the protocol for thematic analysis involved the researcher compiling the translated responses into one document and noting potential codes for each statement. The researcher created a table where codes were grouped and organized based on similarities. A table with themes and codes can be found in Appendix A. Then, the researcher developed a list of themes based on commonalities between the codes. Themes were reviewed, revised, and checked with codes and initial statements to ensure the essence of the response was captured. A secondary coder reviewed the appropriateness of the themes, and any discrepancies were discussed with a third coder. Once agreement occurred across coders, themes were finalized.

Table 5
*Qualitative Thematic Analysis Procedure (Braun & Clarke, 2006; Mueller, 2021)*

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarize yourself with your data.</td>
<td>Transcribing data (if necessary), reading and re-reading the data, and noting down initial ideas.</td>
</tr>
<tr>
<td>2. Generating initial codes.</td>
<td>Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.</td>
</tr>
<tr>
<td>3. Searching for themes.</td>
<td>Collating codes into potential themes, gathering all data relevant to each potential theme.</td>
</tr>
<tr>
<td>4. Reviewing themes.</td>
<td>Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis.</td>
</tr>
<tr>
<td>5. Defining and naming themes.</td>
<td>Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.</td>
</tr>
<tr>
<td>6. Producing the report.</td>
<td>The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected</td>
</tr>
</tbody>
</table>
Chapter 3: Results

The results chapter is comprised of seven sections. The first section describes the demographic information of the families that participated in the M3 program. The second section presents the process evaluation results, specifically evaluating program fidelity, dose delivered, dose received, reach, recruitment, and context (Saunders et al., 2005).

Demographic Information

Participants were Arabic-speaking families recruited from a community agency that supports immigrant families. The program was delivered to three groups, with 18 families recruited, and 12 families agreeing to participate in the study; an additional one child and a different parent were involved in the M3 program but did not consent to participate in the study. (See Figure 1). There were eight parents and nine children who completed the post-measures. The program ran three times, with six families in group one, three families in group two, and four families in group three. Four families did not continue the program following the fourth session but agreed to have their data used up to that point. All parents were females ($n = 10, 100\%$) and females were also more common in the children group ($n = 6, 60\%$). The average child’s age was 8.80 ($SD = 1.69$).
Parents completed a demographic form asking several questions related to their children’s backgrounds. The demographic information is presented in Table 6. All parents reported that their first language was Arabic ($n = 10, 100\%$), and the majority of the children’s first language was Arabic ($n = 8, 80\%$). Some of the children were refugees when they were infants, and therefore parents reported that their first language was English. The average length of time in Canada was six years ($SD = 4.27$), and fewer than half of families arrived in Canada after 2017 ($n = 4, 44.4\%$); one parent did not respond to this question. The most common year for arrival in Canada was 2016 ($n = 3, 33.3\%$). Upon arrival, the most common status was
refugee status for families \((n = 6, 60\%)\), and at the time of this study, the most common status was permanent resident to Canada \((n = 5, 50\%)\).

Parents were also asked about their highest education levels. Obtaining a university bachelor’s degree \((n = 5, 50\%)\) was the most common education for parents and their partners \((n = 3, 30\%)\). Additionally, 40% of parents who responded reported they have completed a high school diploma or less.

Parents reported their child’s culture was Arab \((n = 10, 100\%)\), with Syria \((n = 2, 20\%)\), Sudan \((n = 2, 20\%)\) and Palestine \((n = 2, 20\%)\) being the most common of originating locations. Other locations were Egypt \((n = 1, 10\%)\), Jordan \((n = 1, 10\%)\), and Iraq \((n = 1, 10\%)\). According to the parents, all children lived with their mothers \((n = 10, 100\%)\), the majority also with their fathers \((n = 6, 60\%)\); children living with grandmothers in addition to being with their parents were 20% \((n = 2)\) and all children also lived with a sibling \((n = 10, 100\%)\).

Table 6

**Demographic Characteristics**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Participants that completed the M3 program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n)</td>
</tr>
<tr>
<td>Parent’s sex</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>0</td>
</tr>
<tr>
<td>Females</td>
<td>10</td>
</tr>
<tr>
<td>Child’s sex</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>4</td>
</tr>
<tr>
<td>Females</td>
<td>6</td>
</tr>
<tr>
<td>Parent’s first language learned</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>100</td>
</tr>
<tr>
<td>English</td>
<td>0</td>
</tr>
<tr>
<td>Child’s first language learned</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>8</td>
</tr>
<tr>
<td>English</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child’s living arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
</tr>
<tr>
<td>Father</td>
</tr>
<tr>
<td>Sibling</td>
</tr>
<tr>
<td>Grandmother</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child’s originating location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab</td>
</tr>
<tr>
<td>Egypt</td>
</tr>
<tr>
<td>Iraq</td>
</tr>
<tr>
<td>Jordan</td>
</tr>
<tr>
<td>Palestine</td>
</tr>
<tr>
<td>Sudan</td>
</tr>
<tr>
<td>Syrian</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Family’s status upon arrival to Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refugee</td>
</tr>
<tr>
<td>Sponsorship</td>
</tr>
<tr>
<td>Visitor</td>
</tr>
<tr>
<td>Other: Permanent Resident</td>
</tr>
<tr>
<td>Missing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family’s current status in Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refugee</td>
</tr>
<tr>
<td>Protected person</td>
</tr>
<tr>
<td>Permanent resident</td>
</tr>
<tr>
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</table>

<table>
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<th>Parent’s Education level:</th>
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</tr>
<tr>
<td>Completed Elementary school</td>
</tr>
<tr>
<td>Completed high school or GED</td>
</tr>
<tr>
<td>Completion post-secondary education</td>
</tr>
<tr>
<td>Completion of graduate school</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year of arrival in Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 2016</td>
</tr>
<tr>
<td>2016</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
</tr>
</tbody>
</table>
2019      1      10
Missing   1      10

Number of sessions attended
Number of sessions attended (Parents)

Zero
One       1      10
Two       1      10
Three
Four
Five      2      20
Six       1      10
Seven     4      40
Eight     1      10

Number of sessions attended (Children)

One       0
Two       0
Three     0
Four      0
Five      2      20
Six       2      20
Seven     2      20
Eight     4      40

Process Evaluation Results

Fidelity

Question 1: To what extent was the intervention implemented consistently with the underlying theory and philosophy. Two process evaluation questions were being answered to examine the fidelity of the program delivered. The Adherence Checklist Question 12 was used to answer the above question, “If you made any changes, please describe them here or if you did not complete an activity, please explain why?” There were five activities out of 186 administered across all groups and sessions that were modified in the parent group. In response to the question
as to what changes were made or what activities were omitted, the facilitators reported some modifications, including reading the story in Arabic instead of using the English video for session three in group one for the parent groups. For session seven, some parents did not attend the previous week; therefore, facilitators could not take up the parenting journal at the beginning of the group. In the children’s group, there were four activities out of 162 administered across all groups and sessions that were modified. Common modifications were related to creating a quiz game for the review section of the program and, in session six, replacing a yoga pose with a more physical body movement activity, such as a push-up.

**Question 2: Did all facilitators attend the full training?** When exploring fidelity, facilitators’ competence was examined by recording their attendance in training. All nine female facilitators completed the two-day training ($n = 9, 100\%$). Three facilitators facilitated the parent groups, and six facilitators ran the children’s groups. One-third of the facilitators attended the booster training ($n = 3, 33.3\%$).

**Dose Delivered**

**Question 1: To what extent were all of the intended tasks and activities completed each week?** In order to examine the program dose delivered, the previous question was explored using the Adherence Checklist Question 11, “total number of activities completed according to the manual.” For the M3 parent group, there was a 98\% rate of completion of activities across all eight sessions and of all three groups. The amygdala shakeup activity was not completed for one group due to lack of time. The parenting journal activity was not completed in session six for group two and in session seven for group one, due to a parent attending to childcare needs at that time and parents being absent in the previous session. There was a 100\% completion rate of activities reported across groups and sessions for the child groups.
**Dose Received**

As discussed in the method section in Table 4, four process evaluation questions were asked in order to examine the dose received of the program delivery. These questions were: to what extent were participants present, to what extent did parents and/or children use the skills at home, overall engagement and participation of participants, and did the participants gain knowledge about the M3 concepts and skills (See Table 4). The dose received assessed participants’ engagement and participation in the M3 program. A participant’s presence and knowledge of the M3 concepts and skills were assessed. Although practice of the M3 skills at home was not mandatory, it was encouraged, and participants were asked the amount of practice of the skills they engaged in outside of the program time. Below, the specific item from the tools/procedures are indicated, and the result of each question is discussed in further detail.

**Question 1: To what extent were participants present?** The researcher reviewed and tracked participants’ weekly attendance as documented on the attendance sheet by the research team to answer this question (See Table 4). In the parent group, a large percentage of parents attended five sessions or greater ($n = 8, 80\%$), with the mean number of sessions attended being five ($M = 5.5$), and more than half of the participants attended six sessions or greater ($n = 6, 60\%$). As indicated in the demographic information, four parents discontinued the program after session four ($n = 4, 33.3\%$) because of other commitments.

In the child group, all children attended five sessions or greater ($n = 10, 100\%$), and the majority attended six sessions or greater ($n = 8, 80\%$). One child withdrew from the program after session three. The average number of sessions completed was 6.8 sessions. Overall, children attended 85% of the time across sessions and groups. Children’s attendance dipped in session six ($n = 5, 50\%$) and increased to 90% by session eight.
**Question 2: To what extent did parents and/or children use the skills at home?**

Parents were asked three direct questions related to the practice of M3 skills at home on the Weekly Parent Feedback Questionnaire (Appendix I). In particular, parents responded to questions one to three from the questionnaire by discussing their and their children’s practice level, the amount of practice and the reason behind their practice. A similar practice question was asked verbally to the children at the start of each session using the Child Weekly Feedback Questionnaire (Appendix J).

Question one from the Parents Pre-Weekly Feedback Questionnaires was: 1) “Did you or your child practice any of the skills from the last week’s session?” For question one, all participants who completed the program reported they practiced at some point during the program, accounting for 39 accounts of practice across groups and sessions. Question two from the Parents Pre-Weekly Feedback Questionnaires was: 2) “About how many times did you or your child practice a M3 Skill?” According to parents who reported they practiced, parents practicing with their children was the most common response, followed by practicing alone. When parents practiced with their child or alone, the most frequent amount was one to three times a week. Parents did not report practicing more than ten times with their children. Most children practiced four to six times, according to parents (see Table 7). Question three from the Parents Pre-Weekly Feedback Questionnaires was: 3) “What situation led up to using the M3 Skill?” For question three, parents who responded across sessions reported the most common reason for practicing was simply to practice. Other common reasons were practice due to anger and frustration. Anger and frustration combined account for the majority of the reasons that parents reported practicing (see Figure 2).
Table 7

*Frequency of practice of M3 skills*

<table>
<thead>
<tr>
<th>Number of times practiced</th>
<th>1-3x</th>
<th>4-6x</th>
<th>7-10x</th>
<th>10+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>My child</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Session 3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Session 4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Session 5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Session 6</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Session 7</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Session 8</td>
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<td>1</td>
<td>2</td>
<td>1</td>
</tr>
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<td>Missing</td>
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<td></td>
<td></td>
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<tr>
<td><strong>Me and my child</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Session 3</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>Session 7</td>
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<td>2</td>
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<td>Session 8</td>
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<td>0</td>
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<tr>
<td><strong>Myself</strong></td>
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<tr>
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<td>0</td>
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<tr>
<td>Session 3</td>
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<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td></td>
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</tr>
</tbody>
</table>

*Note.* Parents reported on the frequency of their practice and their children’s practice of M3 skills. Missing data includes an individual who reported they practiced but did not report the amount of practice.
Figure 2

*Reason for Practicing Mindfulness*

![Pie chart showing reasons for practicing mindfulness.]

Notes. This pie chart represents the overall main reason for practicing mindfulness amongst parents in the program.

Lastly, to answer the second process evaluation question, the Child Weekly Feedback Questionnaire question one was used: 1) “Did you practice since last week’s session?” Across sessions and groups, children reported 43 times that they practised the previous week. Session five had the lowest practice rate of three participants. However, following session five, there was an increased rate of practice for session seven with eight participants practicing.

**Question 3: Overall engagement and participation of participants.** To determine overall engagement and participation data were gathered from parents and facilitators. Parents answered two questions from the Parent Weekly Feedback Questionnaire, “What information/skills discussed today do you think will be helpful for you as a parent? Why?” and “Were there any parts of the session that you found confusing? Why? (E.g., not enough time, difficult concept), see Appendix I.” These data were analyzed through thematic analyses. Group
facilitators reported through the Adherence Checklist Question three, what activities the participants seemed to be engaged in and why and rated participants’ interactions and engagement for each session and to what degree each participant had their video on (see Appendix K). Facilitators’ data were analyzed according to the type of data; both thematic analysis and descriptive statistics were used.

**Parental Perception of Session Usefulness.** This analysis explored parents’ perceptions of what they found to be helpful during the session. In question one of the Parents Post Weekly Feedback Questionnaires, there were two themes that summarized information that parents found helpful (see Appendix I). The first theme was the practice of positivity psychology. In this theme, parents reported skills they learned from the program that they could implement in their lives. The following are examples of statements.

*All of it. Learning the different strategies of optimism.*

*The skill of kindness and gratitude*

*Expel negatively and work on positive thinking and behaviour*

The second theme was understanding the brain. In the M3 program, parents learned about brain development and regions responsible for behaviour under stress. Parents’ responses were coded as related to parents’ awareness of parts of the brain, and attribution of their stress and trauma. This theme was divided into two codes. The first code was parental self-regulation. Parents reflected on their own management of their own emotions when interacting with their children. Often, parents reported feeling angry.

*Controlling my emotions when I am angry is a useful skill*

*Breathing method to reduce stress*
Experiencing what we are afraid of, such as being afraid of the dog because of past bad memories

Part of the second theme was related to understanding a child’s behaviour. In the M3 program, there is an emphasis on thinking of the reasons behind a child’s behaviour in order to respond to the child in a mindful manner. Parents alluded to this rationale in the following examples:

Yes, I am able to understand my kids’ feelings and the reason behind their actions
Looking at the children from a different perspective and that their neurons can mirror our actions

Parental Perception of Session Clarity. A thematic analysis was completed to answer the third process evaluation question for dose received, which examined parents’ engagement with the M3 curriculum. To answer this question, the Parents Post Weekly Feedback Questionnaire question three: “Were there any parts of the session that you found confusing? Why? (E.g., not enough time, difficult concept); (see Appendix I).” A qualitative thematic analysis was completed to analyze participants’ responses. There was a main theme which was delivery. A majority of parents who responded to the questionnaire reported that nothing in the session was confusing. Parents who responded reported that all the information provided was clear and readily understood. They also reported that they were satisfied with the program.

One theme was delivery. A few parents who responded reported challenges regarding the content of M3 being confusing or felt that it was a foreign concept. Another barrier reported by parents was the duration of the program.

Some examples of statements were:
No, but I felt that the subject matter was from a foreign (western) study or book, so there was a slight gap between the subject and our Arab culture.

The program is great, but its timing is somewhat difficult. I suggest reducing the duration to an hour if it suits you.

**Facilitators’ Perceptions of Children Engagement.** In terms of dose received for the children, their engagement was analyzed using the Adherence Checklist Question three: “Which activities did the participants do not seem engaged in and why?” was used (see Appendix K).

Most facilitators reported children were engaged with all activities in the session. There was nothing they believed the children were not engaged in. However, for those who identified engagement challenges, there were two overarching themes. The first theme addressed the reasons for not engaging in the program. Facilitators reported that children were disengaged due to internal states such as being fidgety or tired. Facilitators also noted external distractions such as the presence of their siblings.

Some examples of statements were:

*Yoga - fidgety during yoga*

Participants who were sharing screens with their siblings generally seemed distracted and less engaged.

The second theme was the M3 content. In this theme, facilitators reported children were not engaged with certain activities related to the practice of mindfulness, such as mindbreak and yoga. The facilitators noted that certain activities were too long for the children.

Some examples of statements were:

*Mind break and Yoga - were not participating*
The ripple video – they seemed to understand the concept, but there didn’t seem to be enough going on to hold their attention

**Participants engagement.** To further examine dose received, facilitators’ perspectives were provided on participants engagement and overall participation. The Adherence Checklist Question 13_2 was used, and it asked, “How would you rate your overall satisfaction with: - The interaction and engagement of the participants (see Appendix K).” In the parent group, facilitators reported they were satisfied with the engagement and participation of participants \( n = 20, 83.3\% \). In the child group, facilitators reported being satisfied \( n = 11, 45.8\% \) and very satisfied \( n = 7, 29.2\% \) with the engagement and participation of participants.

**Question 4: Did the participants gain knowledge about the M3 concepts and skills?**

The fourth and final process evaluation question in dose received examined participants’ knowledge of the M3 concepts. A paired t-test was completed using the children’s total scores in the Child Mindfulness Pre- and Post-Survey (see Appendix H). The mean pre-test score for the Child Mindfulness Survey was nine \( (SD = 3.77) \), and the mean post-test was 12.11 \( (SD = 1.05) \). The children’s mean post-test scores were significantly higher \( t(8) = -3.11, \ p < .05 \) than the pre-test scores (see Table 8).

Table 8:

*A t-test analysis for Children Mindfulness Survey.*

<table>
<thead>
<tr>
<th>( n )</th>
<th>( M )</th>
<th>( SD )</th>
<th>95% Confidence Interval</th>
<th>( T )</th>
<th>df</th>
<th>Significance ( p &lt; .05 )</th>
<th>Significance ( p &lt; .001 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>-3.11</td>
<td>3.98</td>
<td>[-6.17, -0.05]</td>
<td>-2.34</td>
<td>8</td>
<td>.024</td>
<td>.047</td>
</tr>
</tbody>
</table>
To assess parents’ knowledge of the M3 concepts, a paired t-test was completed to compare the mean pre-test Mindful Parenting Self-Assessment Survey (see Appendix G) scores with the post-test mean scores (see Table 9). The mean pre-test score was 26 ($SD = 7.01$), and the post-test score was 30.38 ($SD = 4.74$). There was no significant difference between the pre and post-test scores [$t (7) = -4.38, p = .138$].

Table 9:

A t-test analysis on Parents Mindfulness Self-Assessment.

<table>
<thead>
<tr>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
<th>95% Confidence Interval</th>
<th>$T$</th>
<th>df</th>
<th>Significance</th>
<th>Significance</th>
</tr>
</thead>
</table>

Recruitment

Question 1: What procedures were used to recruit participants and program facilitators? Program facilitators were recruited from the community agency. The researcher met with the community agency to discuss the program and research study. The manager emailed the program information to staff members and inquired about attending training. Staff members who participated in the training were asked to facilitate the M3 groups. Management shared staff contact information with the research team to provide direct communication. Regarding participants, staff members referred clients who fit the inclusion criteria of the research study. Staff members were provided with a program description and guidelines for
referrals from the program to the research team. Staff explained to the client about the program and obtained their consent before sharing their contact information with the research team.

**Reach**

**Question 1: What are the rates and barriers to participation?**

To answer the reach component of the M3 program, the research assistant documented issues related to the recruitment with input from the community agency. This question was asked of facilitators after they completed the program. The research assistant documented participants’ obstacles to attending the program and potential solutions to support families. The main obstacle for participants was related to technology; particularly in the first few sessions, parents had issues with logging on to the zoom and navigating the online platform. In these cases, the researcher called participants and coached them through the process of creating an account and logging into the online platform. The researcher also conducted practice sessions before the group started where parents tried to log on to the platform. However, some participants had issues with the internet or electronic devices not working. In one case, one family did not have access to a device for the last two sessions of the group, and the equipment was provided to them by the community agency.

Another common barrier to attendance was remembering session dates and times. Parents oftentimes did not check their emails regularly and forgot about the program. The researcher completed weekly calls before and on the day of the session to remind participants. A facilitator would also send a reminder text to each parent on the day before the group was to meet and request that participants confirm their attendance. The use of a separate application that parents could access from their phones helped improve participants’ attendance.
Another challenge to participation was group dynamics. In the first cohort of the parent group, one parent appeared to have a conflict with the rest of the mothers. This perceived conflict caused a shift in group participation, and parents turned off their cameras. The researcher discussed the importance of group safety and ensuring participants were feeling comfortable in the group and at the same time respecting each member in the group. Participants were allowed to have their cameras off if they still wanted to continue with the program. The parent that had conflicts with other participants left the program due to other commitments.

The last barrier to participation was related to disclosures in the group. One parent disclosed suicidal ideation in the group. The researcher informed the caseworker and the partnered community agency management about the incident. Following disclosure, the parent declined to continue with the program, and the child missed the last session of the group.

**Context**

**Question 1: What are the barriers to facilitating and implementing the M3 program?** A focus group was conducted to answer the process evaluation question pertaining to context. Facilitators discussed their perspectives on the implementation of the M3 program. A thematic analysis was completed with the facilitators’ answers, wherein five themes emerged.

The first theme was participants’ interest. Facilitators reported families’ access to and understanding of psychoeducation content was limited and thus, in turn, impacted participation. Some examples of statements were:

*Not understanding initially what the program was about.*

*It's kind of like not really heard of. It's a new thing for most families.*
The second theme was program characteristics. Facilitators described challenges related to implementing the program. These challenges were abiding by the age range for the child group and delivering the program in a time that works for families and facilitators.

Some examples of statements were:

*Sticking within the age range was a bit challenging.

*Setting a time sometimes that was best for the families and facilitators could be challenging*

The third theme was social context. Facilitators reported that COVID-19 restrictions impacted involvement in the group. As restrictions lifted, both parents and children participants were less eager to join the program and preferred to be completing other activities with their peers. Additionally, facilitators alluded to interpersonal challenges. For example, the potential social stigma associated with attending programming in the Arabic community. More specifically, they described how some families might become concerned and ashamed to be a part of the M3 program because of the stereotypes associated with mental health. Additionally, there is a possibility of intra-community dialogue pertaining to information shared in the group.

Some examples of statements are:

*When things opened up more, the children wanted to be more with their peers.*

*The trust. Knowing what could be divulged and how the impacts of that might have on their family was definitely a barrier to maintaining participation and involvement.*

*Intra-community dialogue that could happen within the Arabic community sometimes is a barrier to getting families to participate in programs such as these.*
Chapter 4: Discussion

The focus of the current study was to assess the implementation of the culturally adapted version of the M3 program with Arabic-speaking newcomer families. In particular, the primary objective was to create and conduct a process evaluation plan to assess program successes and limitations with Arabic-speaking refugee families. A process evaluation was undertaken to systematically explain implementation when working with a specific targeted population in collaboration with a community agency to promote resilience in newcomer families. This process evaluation will better inform whether to place resources into studying the effectiveness of the program and how this process may have impacted program outcomes (Saunders et al., 2005). As previously indicated, there are six elements of the process evaluation plan that were investigated: fidelity, dose delivered, dose received, reach, recruitment, and context. This paper explored each of the six elements in relation to the M3 program, along with the implementation successes and challenges.

Process Evaluation

Fidelity

An important component of conducting a process evaluation is assessing program fidelity. Fidelity examines if the intervention was consistently implemented in accordance with the underlying theory (Saunders et al., 2005). Fidelity analysis focused on the quality of implementation of the M3 program. For this study, the parent and child adherence checklist were used to assess fidelity by examining if any modification occurred when delivering the program.

There were a few changes in the parent and child curriculum where the method of delivering the material was modified. Changes in delivery method, however, did not appear to impact the integrity of the M3 program content, and in fact, one change likely improved it
(reading the story in Arabic rather than in English). Language adaption and translation is commonly identified as best practice in the literature (Kumpfer et al., 2008). For example, the review section was presented as a game in the child group instead of verbally asking children to recall materials from previous sessions. There were a few incidents in the parent groups where the parenting journal was not discussed, as parents were absent from the previous group. These changes, however, did not impact the overall focus, such as understanding mindfulness, application of skills, and mindfulness practice.

Fidelity was also supported when examining the training for facilitators. All program facilitators attended the two-day training of the M3 program, and all aspects of the training were completed in those two days. Therefore, facilitators had the necessary resources and training to aid in the facilitation of the program. High-quality training is an important component of successful implementation (Chan et al., 2019). High rates of training further highlighted that the program was implemented in a manner that is consistent with the underlying theory.

**Dose Delivered**

Dose delivered reviewed if all the essential activities and tasks were completed each week. Dose delivered examined the completeness of tasks and activities related to the M3 program. The parent and child Adherence Checklists were used to assess dose delivered by examining if all intended activities were completed. The completion rate of curriculum activities for the parent and child groups were 100% and 98%, respectively. This indicated that, regarding implementation, there was strong evidence of program fidelity, as almost all intended activities were completed in a manner consistent with the program objectives.
**Dose Received**

Several factors were examined in order to determine the amount of intervention received by participants, in particular, investigating the amount of exposure to the program and participants’ engagement and application of M3 skills. These factors included participants’ attendance, facilitators’ reports on participants’ engagement and reflections on activities that children were not engaged in. Facilitators’ overall satisfaction with participant engagement was included. Lastly, parents reported on concepts that they found to be helpful or confusing and the application of M3 skills.

The first factor assessed participants’ exposure to the M3 program by calculating the amount of attendance in the 8-week intervention. Parents attending five sessions or greater accounted for 75% of all participants. On average, parents attended 69% of the program. Low attendance rates in the parents’ group can be attributed to a multitude of factors.

Inconsistent attendance in the parent group was largely attributed to parents becoming ill or having technical issues, such as devices not working or poor wireless internet connection. Another reason was parents reported they had other commitments related to being a single parent, such as running errands or completing migration documents. Although parent participation was lower than anticipated, these challenges were in line with the difficulties related to conducting an online intervention during a pandemic (Karyotaki et al., 2018). Specifically, Karyotaki and colleagues evaluated the effectiveness of online interventions and found the general population reported greater benefits from participating in online programs compared to ethnic minorities.

More specifically, online platforms and technical literacy were especially low for newcomer families, which can have a larger impact on program attendance (Abi Ramia et al.,...
Furthermore, one study conducted a qualitative analysis in Lebanon with Middle Eastern participants participating in an online intervention (Burchert et al., 2019). Participants reported preferring in-person intervention to online platforms as they had difficulties navigating online software. In-person programming alleviated the technical skills required for remote programming, as participants did not have to acquire the needed skills to log on to the program (Bockting et al., 2016). It is important to note that the community agency was also struggling with maintaining consistent attendance with this population in their other online programs. The low attendance rate with Arabic-speaking refugee families was a common limitation across different programs and should be expected in this population.

In the present study, parents had several children they cared for and having an evening group when all children are home can be particularly difficult. In the focus group discussion with facilitators, they reported that parents sometimes had to multitask between childcare needs and listening to the program simultaneously. Parental health, commitments, childcare, and technical literacy were factors that impeded parental attendance.

In terms of the child group, children had a higher attendance rate, and thus dose received than the parents, with an overall rate of attendance of 85%. On average, children attended 6.25 sessions, demonstrating participant engagement with the M3 program. Additionally, discrepancies between parent and child attendance rates were largely attributed to time and technological skills. Children’s groups were run on Saturdays, a day when they had no schooling and children were accustomed to the online platform as they were already completing virtual school (Gallagher et al., 2019). Comparatively, many parents were not previously exposed to online platforms (Abi Ramia et al., 2018). Some of the observations that facilitators and researchers noted in this study were that children did not have the same distraction as their
parents. Children often noted that their other siblings were sleeping. Additionally, they did not have to attend to childcare needs.

Dose received was also measured by ratings by facilitators on participant level of engagement and participation. Although someone may be in attendance online each week, this does not mean they are engaged and taking in the content of the intervention. Disengagement was assessed with children by recording facilitators' perspectives on what activities they thought the children were not engaged in. A qualitative analysis of facilitators’ responses highlighted that the lack of engagement was associated with three themes: the application of the M3 skills, the M3 concepts, and the practice of mindfulness. According to facilitators, they reported children were sometimes not engaged in the creative corner activities. The creative corner activity was an artistic task that children created using the session materials. Often, participants must complete this activity before the group. However, if participants did not complete it before the group, it could impact engagement.

A thematic analysis was conducted on facilitators' perspectives on children’s engagement. It highlighted that the children were not engaged in the review section according to facilitators. The review becomes extensive by session six of the M3 program as it includes one slide summary from each previous topic. When facilitators discussed the review, their comments took a significant amount of time, causing some children to lose attention. Facilitators were encouraged to only review sections that children were struggling with to avoid time delay.

Another theme that facilitators noted was that some children were not engaged with the practice of mindfulness. Practicing mindfulness involved either the mind break (breathing exercise) or a mindful movement (i.e., yoga). Lack of engagement was largely linked to children being distracted by things going on in their homes or being tired during the session. When
practicing mindfulness, children need to focus; if children had distractions around them, they struggled with participating in the mindful activity.

Nevertheless, from the facilitators’ perspectives, in general, they reported they were satisfied with the engagement and participation of participants in the parent group. In the child group, facilitators reported being satisfied with the engagement and participation of children 44% of the time and very satisfied 28% of the time. In both groups, participants were eager to participate when asked questions.

According to parents, the application of M3 skills and tools was an important element of the program. This included the practice of mindfulness, such as mindful tasting, how stress and anxiety impact their behaviour, and breathing techniques such as the mind break. Furthermore, parents highlighted that understanding the brain, in particular learning about brain regions responsible for stress and trauma, was valuable. Parents linking brain regions such as the amygdala as being associated with trauma was interesting as it was a concept that the M3 program does not discuss in detail. However, parents’ ability to understand and connect materials and personal experiences illustrated their engagement. Overall, parent responses provided support for participant engagement in the M3 program, as parents did not just regurgitate program lessons but actively interacted with the materials and built connections between program concepts and their lives.

Parents also reported learning skills to regulate their behaviour when they are angry or stressed. As discussed in previous chapters, refugee parents tend to have higher stress levels in comparison to the Canadian population (d’Abreu et al., 2019). They have typically witnessed atrocities that can impact their way of coping with stress and future stressors. Parents’ recognizing trauma and linking trauma with the amygdala are the first steps to coping with their
trauma. In order to cope with a traumatic experience, one must first identify and label the event or emotions and then apply coping strategies to alleviate symptoms. The M3 program provided parents with resources and tools they can use in times of stress, which parents noted to be helpful.

Interestingly, another theme in the parents’ responses was parents reporting recognizing the importance of mindfulness and parental self-regulation. Parents expressed that they found the sessions useful for regulating their emotions and their children. In particular, they mentioned the importance of mindfulness, avoiding multiple tasking and controlling their anger. In the M3 program, parents learn to identify and label the behaviour and then implement mindfulness strategies to cope with stress. When parents articulate and externalize past events that happened to them instead of viewing themselves or their child in a negative light, it allows them to respond rather than react to situations. By understanding themselves, they can apply appropriate skills to calm their amygdala when they feel stress or recall past negative trauma. This highlights the importance of psychoeducation for this program, as there is often an internal disconnect between past events and current behaviours (d’Abreu et al., 2019). The internal disconnection can be attributed to parental stress. Chronic parental stress can impact the quality of interaction between parent and child relationships (Krick et al., 2019). When parents have difficulties regulating their emotions, it can limit their ability to respond appropriately to their children's needs in times of stress. Thus, mindfulness provides tools for parents to pause between the event and reacting, leading parents to respond mindfully instead of reacting to the child's behaviour.

The literature also indicated the usefulness of mindfulness interventions with refugees. A meta-analysis of 99 studies by Turrini et al. (2019) exploring the effectiveness of psychosocial interventions (cognitive behavioural therapy with a trauma focus, Eye Movement Desensitization
and Reprocessing and stress management) in the refugee population found that these interventions were helpful for families who experienced traumatic events, and that the practice and implementation of mindfulness were associated with increases in the psychological well-being of refugees (Turrini et al., 2019).

Examining parent reports on the usefulness of the M3 program and their awareness of their emotions and their children’s supports the Applied Theory of Change Model for Family Well-being (Newland, 2015). As previously discussed, this model explains the interdependence of family well-being on parenting with Arabic-speaking families. How parent well-being affects child well-being and child well-being also impacts parent well-being. Refugees value interdependence; thus, child and parent well-being influence each other. When children and parents learn mindfulness strategies, they can better communicate with each other in times of stress.

To assess dose received, parent reports of practicing the M3 skills at home were measured. The more frequently parents and children practice mindfulness at home, the bigger the dose of mindfulness practiced and likely, the more emotionally regulated they will be under times of stress. In addition, parents practicing the M3 skills support that they are satisfied with the program (Kabat-Zinn, 2015).

According to mothers who attended the program, at some point during the program, they reported they practiced mindfulness, and one to three times a week was the most commonly reported amount. In the Parent Weekly Feedback, the most common frequency of practice parents reported for children was four to seven times a week, and 66.2% of children who attended the M3 program reported they practiced. Parents and children practicing M3 concepts demonstrate that families were engaged with the program. In the M3 program, it was expected
that as parents and children attend more sessions, participants' practice rates would increase as they developed a greater buy-in towards the program.

When examining the reasons for the practice, parents who responded reported practicing due to frustration or anger 77.8% of the time. This suggests that parents were using mindfulness to cope with strong emotions and practicing in order to build stronger connections in the brain in order to respond instead of reacting to their child’s behaviour.

Examining participants' knowledge of mindfulness after the M3 program was important in assessing if they gained knowledge on the concepts taught in the program. Results suggested that children who attended the program could understand mindfulness and program concepts after completing the M3 program. This was shown through children’s scores at the end of the M3 program being significantly higher in comparison to their scores at the beginning of the program. Children’s increases in mindfulness scores suggested they had obtained more knowledge about mindfulness, particularly using breathing breaks when they have strong emotions than before starting the program. Additionally, the M3 program was successful at improving children’s perceptions of knowledge and practice of mindfulness to regulate their emotions.

The difference between parents’ pre-test and post-test scores in the mindfulness survey were not significant; however, the post scores on average increased. Parents who attended the M3 program responded that they used mindfulness more in parenting after completing the program. It is important to mention that there were only eight parents who completed the post-mindfulness survey due to withdrawal from the study or parents not completing the post-survey. A small sample size can considerably impact finding a significant result, as there was not enough statistical power in the data to detect the difference reliably. Collecting a larger sample for future studies is important to clarify these results.
In summary, the attendance in the parent group was low, which impacted the amount of exposure participants had to the program. However, this limitation was also reported in other programs with this population. In terms of engagement, a qualitative analysis was conducted on facilitators’ feedback, where they noted that some children were not engaged with certain aspects of the M3 concepts and skills. Certain challenges in engagement may be explained by participants not having their cameras on, as it creates a further barrier to participation and engagement with the M3 program. Nevertheless, facilitators reported satisfaction with participants’ engagement in general. This holds true in parents’ responses on the weekly feedback as they found the M3 program to be helpful, clear, and useful. Moreover, parents and children practiced M3 skills at home. In general, the amount of the program intervention was sufficiently received by parents and children.

Recruitment

There is research to suggest that programming with Arabic-speaking refugees is more successful when research is completed in collaboration with local community agencies (Bockting et al., 2016; Ashbourne & Baobaid, 2019). Furthermore, newcomer families are more like to participate in programs if they linked with a community agency instead of a university research study (Ashbourne & Baobaid, 2019). This study, therefore, recruited participants from a non-profit agency that works with newcomer Arabic and Muslim families focusing on violence prevention and intervention. This agency has a wealth of experience delivering programs for Arabic-speaking refugees.

For this study, the research team met with the manager and provided a summary of the M3 program. Management and staff members were interested in the program; however, the recruitment of participants had several challenges as the agency was also recruiting for other
family programs simultaneously, causing referrals to be split between two programs. Additionally, as discussed in the focus group, facilitators reported that the program was in a virtual format which many newcomers were not comfortable accessing. Staff members discussed the difficulty of finding referring families due to the limiting age requirement and felt families did not understand the concepts of mindfulness. Caseworkers had a heavy workload and were not always about to provide referrals in a timely manner.

Recruitment of participants was completed in collaboration with a local community agency. However, due to the online format of the study, staff members noted considerable challenges in recruiting newcomer families. Similarly, to previous components, the online platform persists as a constant challenge with the newcomer population.

Reach

A difficulty with implementing the program was reach, which assesses barriers to participation. One challenge related to working with the newcomer population during a pandemic was access to technology and technical literacy in using the online platform (Abi Ramia et al., 2018). Parents had trouble logging on to the online platform, and in an initial session, it would typically take 20-30 minutes of session time to help parents log on to the platform. The researcher provided support for parents by providing step-by-step instructions on how to log on to the platform and completed a pre-group session with participants to practice using the software. However, some families were still having challenges until halfway through the program.

The delay at the start of the session resulted in the session ending later, disrupting the session’s flow. When some parents logged on later, facilitators provided a quick summary of discussed topics; for parents who logged in on time, repetition of materials may have impacted participation. This was consistent with another study which found difficulties with maintaining
virtual programming for Arabic-speaking refugees as participants were more comfortable with face-to-face programming (Abi Ramia et al., 2018).

Online platforms were a new concept, and mothers were not aware of other participants’ environment, especially if there were other males in the room. Mothers may have felt uncomfortable showing themselves. Families were concerned and worried about the online platform as confidentiality and privacy do not have the same protection as in-person settings (Burchert et al., 2019). For in-person groups, families can see one another and feel confident that no one else is in the room. In a virtual platform, however, researchers do not have control over participants' environment and can only request for families to be in space without others around.

There was one incident of the disclosure pertained to the safety of a group participant. Due to the safety concern, a report was made, which led the family to withdraw from the program. Working with vulnerable and high-risk populations, disclosure can occur, and this can lead to participants discontinuing with the program. It can also impact future participants in the same community to enroll in the program, as they are likely to have concerns about being reported on.

There were also barriers related to attendance. Specifically, parents were reminded to join and attend the program. The researcher conducted several reminders with the families that included emails twice a week and calling participants the day before and day of the sessions. Email reminders were not effective, as families did not check their emails regularly. However, using a phone application where families were given a reminder text helped improve attendance. It was important to recognize that the emails were, at times, long, and it may be overwhelming for parents with low literacy levels. Given that 25% of participants did not complete high school education, those parents may have felt overwhelmed with the text in the emails and a simple
reminder call, or a simple text message would be easier for them to understand. One study reported phone calls were a more acceptable method of communication in refugees compared to emails (Spanhel et al., 2019). Additionally, the community agency also reported obstacles with participants participating in online groups during a pandemic. Families experienced added stress of their other family members being home during this time and may had a hard time finding a quiet place.

To review, there were several barriers to the participation of participants. Notability, the family’s lack of familiarity with the online platform, and parents' trouble accessing and logging into online software, led to a delay in the start of the session. On the other spectrum, participants disclosing safety concerns which facilitators had to report on, caused participants to withdraw from the program following reporting. These barriers hinder the impact, amount and quality of participation in the M3 program. Thus, future studies could develop solutions for these barriers.

Context

As discussed previously, the context of the COVID-19 pandemic impeded participation, but also it impeded facilitation of the M3 program. In a focus group discussion, facilitators discussed the challenges of delivering the M3 program to newcomers in a pandemic. They expressed concerns with engagement related to the virtual platform as families were distracted during the sessions. Facilitators felt participants were distracted at times, and that impacted the delivery of the program. This consideration is consistent with other studies (Karyotaki et al., 2018).

In addition, another aspect of the context theme was interpersonal challenges. In particular, facilitators mentioned trust. Facilitators felt that building rapport with participants was difficult, and it took participants longer to open up about challenges. However, trust in group
settings generally takes four to six weeks to be developed. Trust is a common challenge reported in the literature; one study found that refugees reported having a lack of trust in mental health interventions and online platforms (Burchert et al., 2019).

Facilitators alluded to participants being ashamed to participate in a program, as they might believe that only people who have mental health concerns access this service. The ongoing negative dialogue in the Arabic community pertaining to programming may impact participants' acceptance and engagement in the program. Moreover, participants initially might not see the benefit of psychoeducation or have knowledge of psychoeducation resources or information and may be hesitant to enroll in the program (Abi Ramia et al., 2018). However, through participants enrolling in the program and recognizing the benefits of the program, they are likely to refer other families and express their success in being in the program.

Ongoing education of families about mindfulness at the referral stage was an important task to break down stigma. Staff members from the community agency and the research team explained that the M3 program was to support and provide additional resources for families to cope with some of the challenges associated with being in a new country. Additionally, highlighting to parents the potential benefits of enrolling in the program and that enrollment does not mean there is something wrong with their family. Spanhel et al. (2019) reported that explaining the purpose and benefit of activities in psychoeducation programs increases parents’ acceptance of the program.

Lastly, the context of the Covid-19 pandemic and restrictions lifting also appeared to impede participation. As restrictions began to lift, families wanted to be outside rather than stay indoors to complete a virtual group. Restrictions have been found to impact other virtual groups, and unfortunately, they cannot be controlled as they are external factors (Tang et al., 2021).
To summarize, the context of the pandemic impacted participation in the M3 program. Families were hesitant about joining an online intervention. As discussed in the focus group with facilitators, they expressed that families were uncertain and were distrustful of psychoeducational programs. Furthermore, accessing educational programs in the community was stigmatized; thus, participants were reluctant to join and be present in the M3 program. Additionally, as the Covid-19 restrictions began to lift, participants were less motivated to join the online program.

**Limitations**

The first limitation of this study was attendance. Particularly, there were only nine families who continued with the program, and parents’ attendance was mediocre and inconsistent. Participants’ inconsistent exposure to the program may have impacted the amount of feedback received across all eight sessions and reduced the amount of quality data available. The limited amount of feedback may have affected the reliability of responses.

Another limitation was the source of recruitment. Participants were recruited from one community agency, and clients accessing the agency may not be a true reflection of all newcomer Arabic-speaking families. Some participants resided in Canada for longer than five years. This may be a limitation as they have lived in the country longer compared to a newly arrived refugee. However, being in Canada longer does not change the implication and effects of fleeing from conflict.

The community agency recommended the program be delivered in person as virtual programming with the newcomer population was challenging. The community agency reported that in-person groups obtain greater participant engagement. However, due to the COVID-19 pandemic mandated health restrictions, a virtual program was the only option to ensure the safety
of workers and families. Nevertheless, virtual programs have limited the number of individuals enrolling in the M3 program and their feedback.

The timing of the program for the parent groups was another limitation. Parent groups were delivered in the evening when most children were home. Evening groups coincided with dinner and children’s bedtime, producing parents who were, at times, distracted as their children would interrupt them multiple times in the session. Most mothers were alone with their children and did not have anyone to take care of the children while they were in session. Multiple disruptions in the group could impact parent engagement with the material and attending the session.

Lastly, self-report bias could have an impact on results. Parents were asked to report how often they practiced from the previous week; they had to think retroactively of what happened that week. Parents may not have an accurate depiction of how often they or their children practice. Similarly, children were asked in front of facilitators to report if they practiced, and children may feel obligated to report they practiced for social desirability. Overall, social desirability may have led parents and children to say that they practiced more than they did.

**Future Research and Implication**

Future research could include scaling up the research with the immigrant Arabic population to include other families outside of the local community agency and increase the sample size of participants. Recruiting from multiple agencies and sources, differing agencies that work with newcomer populations, and schools to obtain a more accurate representation of the newcomer population is suggested. Implementing the M3 program in person and being mindful of the timing of delivery to the parent group are also recommended. Should the group be online, ensure that the parent groups are delivered when children are at school to reduce session interruptions.
Newcomer families tend to have a larger age group among their children. Unfortunately, certain families were unable to attend or were not referred because their children were older than the age requirement for the M3 program. Including a teen group in the M3 program could bring a holistic approach to programming as both younger and older children and parents attend. Additionally, in the current study, there was an absence of fathers involved in the program. Future research should try different avenues to engage with fathers to provide a holistic family approach. Providing an information session in the evening can be an avenue to reach and recruit fathers to the program.

**Conclusion**

A process evaluation plan for implementing the culturally adapted version of the M3 program with Arabic-speaking newcomer families was conducted. Through analyses of the data using the six elements of the process evaluation plan (i.e., fidelity, dose received, dose delivered, reach, recruitment, context), program successes and limitations were examined. This study presented promising data that can add to the literature surrounding the implementation of culturally adapted mindfulness interventions with newcomer families. The process evaluation plan of the M3 program highlighted a need for a larger in-person study to be conducted to combat some of the issues related to the online platform. Future studies should implement and scale up the M3 program to build on this initial feasibility study of a concurrent mindfulness-based intervention with Arabic-speaking newcomer families.
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Appendices

Appendix A: Codes by Theme

What did you find helpful?

Theme 1: Practice of positive psychology

Using Optimism
Optimism and self-confidence
All of it. Learning the different strategies of optimism

Gratitude Practice
Feeling grateful to those around you
The skills of kindness and gratitude

Positivity
Expel negativity and work on positive thinking and behaviour
Positivity

Theme 2: Understanding the Brain

For parent self-regulation
Controlling my emotions when I am angry is a useful skill
Breathing method to reduce stress
Experiencing what we are afraid of such as being afraid of the dog because of past bad memories

For child behaviour
Yes, I am able to understand my kid’s feelings and the reason behind their actions
Looking at the children from a different perspective and that their neurons can mirror our actions

Codes by Theme:
Were any parts of the Session that you found confusing?

Theme 1: Delivery

Content
No, but I felt that the subject matter was from a foreign (western) study or book, so there was a slight gap between the subject and our Arab culture
Breathing techniques were confusing
This session had a lot of helpful information but, some were difficult to comprehend.

Timing
The program is great, but its timing is somewhat difficult. I suggest reducing the duration to an hour if it suits you.

Theme 2: Nothing

Satisfaction
There is enough time and there were good ideas
No, all the parts were clear

Codes by Theme:
What activities did participants (children) not seem engaged in? Why?

Theme 1: Distraction

Internal
Yoga - fidgety during yoga
Creative corner – they were all ready to tap out at that point and had some zoom fatigue.
The children had low energy today.

External
Participants who were sharing screens with their siblings generally seemed distracted and less engaged.

Theme 2: Content

Mindful Practice
Mind break, and bubbles activities. The children had low energy today
Mind break and Yoga were not participating

Length of Activity
The ripple video – they seemed to understand the concept, but there didn’t seem to be enough going on to hold their attention
The book – “I Hear a Pickle” is targeted more at younger children. It’s also quite long.

Theme 3: Nothing

Nothing
No

Codes by Theme:
What are the barriers for facilitators to implementing M3 program?

Theme 1: Participant Interest

Knowledge of psychoeducational programs
Not understanding initially what the program was about.
It’s kind of like not really heard of. It’s a new thing for most families.

Theme 2: Program Characteristics
**Age range for Children**

sticking within the age range was a bit challenging.

**Timing of the Program**

Setting a time sometimes that was best for the families and facilitators could be challenging

**Theme 3: Social context**

**Pandemic related**

When things opened up more, the children wanted to be more with their peers

**Interpersonal**

The trust. Knowing what could be divulged and how the impacts of that might have on their family was definitely a barrier to maintaining participation and involvement. Inter-community dialog that could happen within the Arabic community sometimes is a barrier to getting families to participate in programs such as these.
Appendix B: Letter of Information for Parents/Guardians

LETTER OF INFORMATION FOR PARENTS/GUARDIANS

Study Title: Making Mindfulness Matter with Arabic Speaking Families

1. Invitation to Participate
My name is Karen Bax, and I am a professor in the Faculty of Education at Western University. I am piloting an adapted version of the Making Mindfulness Matter program (M3) with the Muslim Resource Centre for Social Support and Integration (MRCSSI) to understand the impact of mindful awareness on the wellbeing of Arabic-speaking newcomer families. As principal investigator, I am inviting you and your child to participate in research to understand the impact of this program on participants well-being.

2. Why is this study being done?
The purpose of this study is to determine if the M3 program can benefit Arabic-speaking newcomers. M3 teaches mindful awareness and social-emotional skills to parents and children in an online group setting. In the program, you will learn to better pay attention to your feelings, thoughts and behaviours in the moment so that you can manage intense emotions, make positive choices, and feel less stress. There is very little research describing how a program like this could support wellbeing for both newcomer children and parents. The study aims to determine if M3 can improve the wellbeing of newcomer families and whether these families find the program helpful. This letter outlines what would be involved if you and/or your child choose to be part of this study. If you agree to participate, you will be asked to sign the consent form.

3. How long will you be in this study?
The M3 program is 8 weeks long, with a 1.5-hour online group session each week for parents, and a 1-hour online group session for children. The group sizes are small (4 to 8 people), and children and parents will be in separate sessions.

4. What will happen during the study?
If you agree to participate in this study, you will be asked to complete questionnaires at two-time points: at the start of the study and after the last session. The questionnaires are estimated to take 45 minutes to complete. The demographic questionnaire will ask questions such as who lives in your household and how long you have lived in Canada. The other questionnaires will ask about the well-being of yourself and your child.

At the start of each session that you attend, you will be asked questions about practicing the M3 skills at home. You will also be asked a few questions to gather additional feedback about the M3 session that just finished. This weekly survey will take approximately 5-10 minutes to complete.

If you consent to your child participating in the study, they will be assessed on their mindfulness knowledge before the program and again, after the program.

You and/or your child can choose to complete the questionnaires on your own, in either English or Arabic, through a secure database called Qualtrics, or through the support of a research team member. If you choose to complete the questionnaires with a research team member, we will be using Western Corporate Zoom.

In order to participate in the program sessions, you will require access to a reliable internet connection and a computer and/or mobile device. If you do not have a computer and/or mobile device, we will aim to provide you with a mobile device, though we cannot guarantee it.

5. What are the possible risks of participating in this study?
The potential risks associated with participation in the present study are low. If you experience stress while participating in the study, please use this resource: https://www.beyondblue.org.au/who-does-it-affect/multicultural-people/translated-mental-health-resources. As well, during the M3 sessions, you will be asked if you are experiencing an increase in stress due to the program, and facilitators will be available to discuss strategies related to stress reduction.

You can also contact the Canadian Mental Health Association (CMHA) Middlesex Reachout Crisis Line at 1-866-933-2023. This number will connect you with a 24/7 crisis line staffed by English speaking mental health professionals. If you are not comfortable speaking in English, you can contact the MRCSSI to support you. You can also access the following information online:

- Other helplines for children and youth, OPEN 24/7 are:
  - Kids Help Phone (English only)
    - For children and youth ages 5 to 20.
    - Toll-free: 1-800-668-6868
    - Text: 686868
    - Webchat: https://kidshelpphone.ca/
  - Good2Talk (English only)
    - For youth ages 17-25
    - Toll-free: 1-866-925-5454
    - Text: GOOD2TALKON TO 686868
6. **What are the benefits?**
A benefit of this study is that it provides an opportunity to experience the potential benefits that mindful awareness may have for you and your child’s well-being (e.g., decreased feelings of stress, more focused attention in the moment, better management of strong emotions). However, it is possible that you will not experience any direct benefits through participating.

7. **Is participation voluntary?**
Participation is voluntary, including speaking to the researchers, and you may withdraw your participation in the research study and/or your child’s at any time without any negative consequences. If you decide to withdraw your own and/or child’s participation from the study, you will have the choice of whether the information that was collected before you leave can still be used in the study.

8. **How will information be kept confidential?**
The responses from questionnaires will be collected through a secure online survey platform called Qualtrics. Qualtrics uses encryption technology and restricted access authorizations to protect all data collected. The information will be exported from Qualtrics to a secure, password-protected computer in our locked research office. Once the questionnaire is submitted online, responses cannot be withdrawn. If you choose to exit the survey before submission, any responses entered prior to withdrawal will not be stored.

While there is no guarantee, we will do our best to protect the privacy of all your information by using only a study identification number for you on all questionnaires rather than your name. Your name, telephone number, email and your child’s year and month of birth will also be kept securely on a master list in a secured password-protected file on a computer in the research office, so we can contact you and administer the study.

Your identity and that of any family members will be kept confidential in any reports or presentations that result from the study. According to Western University’s Research policy, the collected information will be held for 7 years, and then the computer file will be permanently deleted, and the consent forms in the file will be shredded. Representatives of the University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

Your privacy cannot be maintained if information that is reportable by law is shared. This includes situations in which you or someone else is at risk of being seriously hurt, if a child is being harmed, or if any harm has been done by a health professional. Reports may be made to the Children’s Aid Society or London Police.

11. **What are the rights of the participants?**
You have the right not to answer individual questions about you and your child. You do not waive any legal rights by providing consent to participate.

12. **Whom do participants contact for questions?**
If you would like more information about this study or your role in it, please contact me by phone at 519-661-3638. If you have any concerns about your participation in this study, you can contact Western University’s Office of Research Ethics at 519-661-3036, ethics@uwo.ca.

Both myself and the Western University’s Office of Research Ethics communicate in English. If you prefer to communicate in Arabic, we have a research assistant that you may contact or a staff member to ask your questions or concerns, and they can reach out on your behalf.

Please complete the attached form even if you do not wish to participate in this study.

Sincerely,
DECLARATION OF CONSENT

Study Title: Making Mindfulness Matter with Arabic Speaking Families

I have read the attached Letter of Information about the “Making Mindfulness Matter with Arabic Speaking Families” study. All questions have been answered to my satisfaction. A copy of this letter will be sent to me by email.

☐ I agree to participate in the study “Making Mindfulness Matter with Arabic Speaking Families.”

☐ I do not agree to participate in the study, “Making Mindfulness Matter with Arabic Speaking Families.”

☐ I agree to my child’s participation in the study “Making Mindfulness Matter with Arabic Speaking Families.”

☐ I do not agree to my child’s participation in the study, “Making Mindfulness Matter with Arabic Speaking Families.”

Parent name: ________________________________________

Child Name: _________________________________________

Parent’s Signature: __________________________________________

Date: _______________________________________________________________

Once the study is complete, we will hold a group information session, either online or in-person, to share the results of this research study. Information about the results of the study will also be made available through an infographic in English and also translated into Arabic. Please share a telephone number or email address that we can use to invite you to attend this session or send you the infographic. Your attendance is voluntary.

Email Address: _______________________________________________________

Telephone number: ___________________________________________________
LETTER OF INFORMATION FOR CHILD ASSENT

Study Title: Making Mindfulness Matter with Arabic Speaking Families

1. Why are you here?
Being new to Canada can be hard as you are learning many things at the same time, such as a new language and culture. You are being invited to be a part of a study to see if this program, called Making Mindfulness Matter (M3), can help you handle stress and problems better. We are doing a research study about the group to learn more about whether the group is helpful to you. A research study is a way to learn.

2. Why are we doing this study?
We are doing this study to see if a mindful awareness program can help newcomer children and parents feel better. Mindful awareness simply means noticing what is happening right now. The live online program teaches things like being able to notice what is happening right now, learning to control big emotions and being positive. We want to know if you like being a part of the group and if going to the group makes you feel happier than before you went to the group.

3. What will happen to you?
If you want to be in the study, you will join the online child program for 8 weeks with other children. At another time, your Mom or Dad will join the online parent program. At the end of each session, your Mom or Dad will come to your group and practice a mindful skill with you.

1. Will there be any tests?
No, there will not be any tests. There will be questions for your parents to answer about how you are doing. At the beginning of the class and 8 weeks later, we will ask you some questions on how you feel about what you learned. During each class, we will ask you what activities you enjoyed and if you practiced any activities at home.

2. Do you have to be in the study?
No, you do not have to be in the study, and you can still be in the M3 program without being involved in the study. No one will be mad at you if you do not want to do this. If you do not want
to be in the study, tell the program leader or your parents. Even if you say yes, you can change your mind later.

3. **What if you have questions?**

You can ask questions at any time, now or later. You can ask your family or the program leader or [redacted].
Assent form was discussed, and the child agreed to participate.  δ Yes  δ No

Person obtaining assent ______________________________

Signature of person obtaining assent ______________________________

Date assent was obtained _____________________
Appendix D: Telephone Script for MRCSSI

TELEPHONE CONTACT SCRIPT: PARENTS AND/OR CHILD <14 YEARS

Study Title: Making Mindfulness Matter (M3) with Arabic Speaking Families

Hi (Participant – Parent - Name):
This is (Staff Name) from MRC. I am reaching out to see if you are interested in participating in a group titled Making Mindfulness Matter (M3). This group teaches mindful awareness skills to both parents and children, concurrently. Throughout the program, families learn and practice mindful skills such as managing their thoughts, regulating their behaviour and emotions, perspective taking and gratitude. The groups will be one hour long, take place once a week, and will be offered online during the COVID-19 Pandemic.

The M3 groups are being evaluated to see if youth and parents find the group helpful. If you are interested in participating in the group, you will also be invited to participate in the evaluation.

Are you interested in participating in the M3 group beginning on (Date)?
☐ ☐ Yes ☐ ☐ No

Are you interested in having your child participate in the M3 group beginning on (Date)?
☐ ☐ Yes ☐ ☐ No

[If no]: Do you have any questions or concerns about your own or your child’s participation?

**Address any questions or concerns**

[If they continue to not be interested]: If you change your mind and wish to participate and/or have your child participate in the future, please do not hesitate to contact us.

**End call here**

[If yes]: Great, we are so glad.
As I mentioned, this group is also being evaluated to see if it is helpful. If you are interested in learning more about how you and/or your child can participate in the research, I can have someone from the research team contact you to provide you with more information about the research that would be involved. Would you like to speak to a member of our research team?

[If yes]: Okay, Thank-you. Can you please share a telephone or email address that they can use to contact you?

Participant name: ______________________________
Telephone number: ______________________________
Email address: ______________________________
Thank you, I will share your name and contact information with the research team, and someone will be in touch to schedule a call with you. The research team only speaks English. Will you feel comfortable speaking to them in English, or would you like us to arrange to have a translator be present?

☐ ☐ English speaking ☐ ☐ Translator necessary

[If translator necessary]: In what language would you like the translator? __________________________

If you agree to participate in the study, there will be some documents for you to sign. We can have these documents available in English or Arabic, or we can have a translator assist with reading and writing responses in the language you feel most comfortable with. What is your preference?

☐ ☐ Materials in English ☐ ☐ Materials in Arabic

☐ ☐ Assistance with reading and writing responses in (Language) __________________________

Great, thank you. I will share this information with the research team, and these accommodations will be in place when they contact you in a few days.

[If no]: Thank you for listening. You and/or your child can be part of the M3 group.
Appendix E: INITIAL RESEARCH TELEPHONE CONTACT SCRIPT

Study Title: Making Mindfulness Matter (M3) With Arabic Speaking Families

Hello (Name of the participant), thank you for showing interest in our study. My name is (Name of Caller). I am a research assistant, and I will speak to you about the Making Mindfulness Matter (M3) study being conducted by Dr. Karen Bax at Western University. Is this an okay time to tell you a bit more about the study and to see if you are interested in participating?

[If translator present]: I have a translator here who will translate the information that I will be sharing with you today.

[If no]: When would be a good time to call back?

[If yes]: The research study is linked to the group starting on (Date).

**Research assistant to summarize the LOI**

Are you interested in participating in this study?

[If no]: Thank you for your time. If you change your mind and wish to participate in the future, please contact [Contact Information]. Have a good day.

[If yes]: That is great, we’re glad.

Before the group begins, we will have a one-on-one appointment with you. During this appointment, we will review information about the group and have you completed some questionnaires.

[If speaking to a parent whose child will be participating]: During the call we will also want to meet briefly with your child to explain the study to them, ask them if they are interested in participating, and have them complete some questionnaires.

This call will take approximately 30 minutes, and it will happen online by video, which means you will need internet access during this time. Are you available (List 2-3 Dates and Times)?

**Write down the time and date the participant is available**

The appointment will take place over Western University’s Corporate Zoom. One-hour prior, I will email you a link to access the appointment.

Could I have your email address to send you this link?

**Write down participant’s name and email address**

Would you like a reminder call or email about the appointment the day before?

- [ ] No reminder
- [ ] Email reminder: __________________________________________
- [ ] Telephone reminder: ____________________________________
[If a translator is required]: A translator will be available during this call.
Do you have any questions about the study or about our appointment? **Answer any questions that arise**
Thank you for your interest in this group and study. I look forward to our appointment on (Date and Time of Appointment).

Have a good day.
Appendix F: Parent Demographic Form

Study Title: Making Mindfulness Matter with Arabic Speaking Families

My child is

☐ Male
☐ Female
☐ Self-Identifies as _____________________

Her/his birth month is (print): ______________________________________________

Her/his birth year is (print): ________________________________________________

Her/his first language learned: ______________________________________________

We arrived in Canada from (Country of origin): ________________________________

Date of Arrival in Canada: _________________________________________________

Status upon Arrival: _______________________________________________________

Current status: ___________________________________________________________________

My child lives in a home with her/his (check all that apply):

___ Mom
___ Moms
___ Dad
___ Dads
___ Step-mother
___ Step-father
___ Grandma
___ Grandpa
___ Other relative: _______________________________________________________

___ Siblings

___ Brother(s)
___ Sister(s)

___ Other (Please Specify): __________________________________________________
Education level:
Parent/Guardian 1:
___ No formal education completed
___ Completed Elementary school
___ Completed High School or GED
___ Completion of an apprenticeship or trades certificate or diploma
___ Completed a College Diploma (program/specialization)
___ University Bachelor’s Degree
___ University Master’s Degree
___ University Ph.D.
___ No completion of a certificate, diploma, degree
___ Completed Other (Please Specify): ______________________________________

Parent/Guardian 2 (if applicable):
___ No formal education completed
___ Completed Elementary School
___ Completed High School or GED
___ Completion of an apprenticeship or trades certificate or diploma
___ Completed a College Diploma (program/specialization)
___ University – Bachelor’s Degree
___ University Master’s Degree
___ University Ph.D.
___ No completion of a certificate, diploma, degree
___ Completed Other (Please Specify): ______________________________________

My child’s ethnic/cultural background is (check all that apply):
___ Arab
___ Iraqi
___ Lebanese
___ Palestinian
___ Syrian
___ Jordanian
___ Saudi Arabian (KSA)
___ Arab Gulf nations (other than KSA) __________
___ Yemeni
___ Egyptian
___ Libyan
___ Algerian
___ Tunisian
___ Moroccan
___ Mauritanian
___ Sudanese
___ Somali
___ Djiboutian
___ Comorian

___ Other (Please Specify) ________________________________

Thank you very much!
Appendix G: Mindful Parenting Self-Assessment

**MINDFUL PARENTING SELF ASSESSMENT**

**Id Code:**

Based on the last 8 weeks, please rate your option to the following statements. There is no right or wrong answers.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Regularly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I practice mindfulness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. My child and I practice mindfulness together.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I think about the brain and how it connects to our emotions and behaviours when supporting my child.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I am confident in my ability to help my child calm down when she/he is upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I use calm down tools in helping my child calm down when she/he is are upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I am able to manage my own emotions when supporting my child's needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I can recall and reflect on happy experiences between myself and my child.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I am able to be in the moment with my child when parenting with limited distractions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I am able to recognize in my body when I am feeling stressed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I am able to look at my parenting from the perspective of who my child is and why she/he is doing what they are doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I feel confident in my ability to be firm but kind when supporting my child.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix H: Child Mindfulness Survey

PRE/ POST
(M3- Making Mindfulness Matter)

Date: _______________

ID Code: _______________

1. I know how my brain works when I am angry or upset.

[Smiley face] [Neutral face] [Sad face]

2. I know what a breathing break is.

[Smiley face] [Neutral face] [Sad face]

3. I use breathing breaks to calm my big feelings.

[Smiley face] [Neutral face] [Sad face]

4. I have lots of great ideas to help me when I have a problem.

[Smiley face] [Neutral face] [Sad face]

5. I know how to be kind to others.

[Smiley face] [Neutral face] [Sad face]

6. Mindfulness is…

[Smiley face] [Neutral face] [Sad face]
Appendix I: Parent Weekly Feedback Questionnaire

Please complete the following questions before the start of this group:

1. Did you or your child practice a M3 skill since our last session?  Yes ☐ No ☐ (If no, please go to question 5)

2. About how many times did you or your child practice a M3 skill?

<table>
<thead>
<tr>
<th></th>
<th>You:</th>
<th>Your Child:</th>
<th>You and Your Child Together</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1-3</td>
<td>☐ 1-3</td>
<td>☐ 1-3</td>
<td></td>
</tr>
<tr>
<td>☐ 4-6</td>
<td>☐ 4-6</td>
<td>☐ 4-6</td>
<td></td>
</tr>
<tr>
<td>☐ 7-10</td>
<td>☐ 7-10</td>
<td>☐ 7-10</td>
<td></td>
</tr>
<tr>
<td>☐ 10+</td>
<td>☐ 10+</td>
<td>☐ 10+</td>
<td></td>
</tr>
</tbody>
</table>

3. What situation led up to using the M3 skill?
   ☐ To practice ☐ Due to frustration ☐ Due to anger ☐ other __________

4. Did you/your child find it helpful?
   You:  ☐ Yes ☐ No ☐
   Your Child:  ☐ Yes ☐ No ☐

5. What kept you from practicing M3 skills this week?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Please complete the following questions after the group: Group

1. What information/skills discussed today do you think will be helpful for you as a parent?

    Why?
2. Were there certain parts of our session today that you felt we should have spent more time or less time on?

3. Were there any parts of the session that you found confusing? Why? (E.g., not enough time, difficult concept).

4. Additional comments/feedback?
Appendix J: Child Weekly Feedback Questionnaire

M3 Arabic
Informal Data Collection Sheet
Children’s Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Week/Session</th>
<th>Date (DD-MM-YYYY)</th>
<th># of Participants (# Males, # Females)</th>
<th>Recorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Before the session starts:

- Did you practice [previous week’s skill] since last week’s session? (show of hands)
  - IF YES, get examples about when/how they practiced [previous week’s skill], what was the outcome?
  - IF NO, why not? Were there times you could have? What kept you from practicing?

At the end of the session:

- What was your favourite thing/activity you learned today? Why?

- What was your least favourite thing/activity you learned today? Why?

- Did you find any activities or things we talked about today hard to understand? Probe further if anyone says yes.
# Appendix K: Adherence Checklist

M3 Program Session [write session number here]: [Write session title here]

PROGRAM ADHERENCE CHECKLIST

<table>
<thead>
<tr>
<th>Facilitator Names:</th>
</tr>
</thead>
<tbody>
<tr>
<td>____________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(day/month/year)__________________</td>
</tr>
</tbody>
</table>

| Group Number:__________________ |
|__________________ |

<table>
<thead>
<tr>
<th>Person(s) filling out this form</th>
</tr>
</thead>
<tbody>
<tr>
<td>________________________________</td>
</tr>
</tbody>
</table>

| □ Parent Group □ Child Group |
|__________________ |

<table>
<thead>
<tr>
<th># of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants:__________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did you complete each activity below?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes</td>
</tr>
<tr>
<td>Completely</td>
</tr>
<tr>
<td>□ Yes with changes</td>
</tr>
<tr>
<td>□ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If you made changes, please describe them here, or if you did not complete an activity, please describe why here.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| ______ Total # of activities competed out of 7 |
|                                               |
| ______ Total # of activities not complete    |
How would you rate your overall satisfaction with:

<table>
<thead>
<tr>
<th></th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today’s online session overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interaction and engagement of the participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The online format of the session</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of delivering the intervention live-online</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Which activities listed above did the participants seem well engaged in and why?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Which activities did the participants not seem engaged in and why?

______________________________________________________________________________

______________________________________________________________________________

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

Participant ID: ______

- Was the participant’s camera turned on during the session?
  - No
  - Yes, part of the time.
  - Yes, most of the time.
  - Yes

General Comments:
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
Appendix L: Parent Program PowerPoint slide

Opening: Invitation to a Mindful Moment – 20 seconds

Slide 6

- Introduce the Mindful Moment/Mind Break to participants and explain that each session will open and close with this activity.

**Mindful Moment:**

- I invite you to be in the present moment with me. I would like to invite you to participate in a mind break with me. What we are going to practice is a moment of mindfulness, why we are doing this will become clear as you learn more about stress, the brain, and what you can do to decrease stress and feel happier. But for now, I invite you to participate in this with me, not yet knowing the full reason why.

- I invite you to sit comfortably, with both feet on the floor, feeling the solidness of the ground beneath your feet. Place your hands in a comfortable position on your lap. Close your eyes or, if you prefer, look down into your lap.

- I invite you to listen to the chime until you cannot hear it any longer – when you can no longer hear the chime, I invite you to focus your attention on your breath. We will do this for approximately 20 seconds. Each week we will be increasing the time by approximately 10 seconds. At the end of the mind break, I will ring the chime again. Focus on the sound, and when you can no longer hear the sound, you can look up.
  - Facilitator Note: Click on the speaker icon on the upper right-hand side of the screen; this will play a chime sound.
THE DEVELOPING BRAIN

- The brain is the only organ not fully developed at birth
- Everything we experience impacts how our brain develops
- Through repeated experience (repeated thoughts, feelings, or behaviours), the networks in our brain become strengthened, and then the experience becomes easier, takes less effort and is faster

BRAIN REGIONS

- The upstairs and downstairs brain
- Like a house, our brains develop from the bottom up. The downstairs brain develops first—it is our survival brain—This part of the brain is in control of more automatic things we do like breathing or going into “fight, flight or freeze” when angry or fearful
- The upstairs brain continues to develop until age 25, and its primary purpose is to regulate or help control the downstairs brain
Appendix N: The Family Resource Cards

Introduction to the Mindful Moment:
The Mind Break

Purpose
To give your mind a rest by only thinking about
one thing. Breaks can be used anytime throughout
the day.

Helpful Tips
Don't worry if your mind wanders—that's what
they do!
Your only job during the Mind Break
is to notice when your mind wanders and bring it
back to your breathing.

It's okay to start small! Building mindful
awareness is like building a muscle—it gets easier
with practice. Start with a short 10 second Mind
Break and slowly increase your time by 5-10
seconds each time!
Appendix O: Letter of Information for Community Providers

LETTER OF INFORMATION FOR COMMUNITY PROVIDERS

Study Title: Making Mindfulness Matter (M3) © with Arabic Speaking Families

Invitation to Participate

As the principal investigator, Karen Bax, Ph.D., C. Psych, is inviting you to participate in a focus group about your experiences delivering and implementing the culturally adapted Making Mindfulness Matter © (M3) with Arabic speaking families. This study aims to evaluate the process of adapting the M3 program and challenges in implementing the program with Arabic-speaking families in collaboration with the Muslim Resources Centre for Social Support and Integration (MRCSSI).

Why is this study being done?

The purpose of this study is to determine if the M3 program can benefit Arabic speaking newcomers. The M3 program teaches mindful awareness and social-emotional skills to parents and children in an online group setting. Families learn to better pay attention to their feelings, thoughts and behaviours in the moment so that they can manage intense emotions, make positive choices, and feel less stress. There is very little research describing how a program like this could support wellbeing for both newcomer children and parents. Thus, the study aims to determine if M3 can improve the wellbeing of newcomer families and whether these families find the program helpful.

The M3A program is completed in collaboration with the Muslim Resources Centre for Social Support and Integration (MRCSSI), an anti-violence agency that specializing in working with newcomer families from conflict zones who identify as Muslim or Arabic-speaking. MRCSSI has expertise in delivering and culturally adapting evidence-based programs and are assisting in translating and cultural adaptation of the M3 program.

The focus group aims at evaluating the process of adapting the M3 program and the challenges in implementing the program with Arabic-speaking families. The goal is to understand the areas where the research and the program can improve on to ensure families engage and participate in the program.
How long will you be in this focus group?

You will be invited to participate in a one-hour focus group held virtually via Zoom.

What will happen during the focus group?

Participants will be asked questions about the challenges in recruiting, implementing, and engaging with Arabic speaking families when delivering the M3A program. These reflections will help the M3 Team improve programming.

How will information be kept confidential?

Please be advised that although the researchers will take every precaution to maintain confidentiality of the data, the nature of focus groups prevents the researchers from guaranteeing confidentiality. Electronic data will be stored on a secured server at Western University. Your personal information will be kept separate and will not be linked to your data. The researchers would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the focus group to others.

When entering the Zoom platform, please remove your name and keep your video off. The Zoom will be audio-recorded to help with transcription. Transcription will be done by a member of the research team and will only capture content related to improving processes. The content transcribed will be unidentified.

This study uses third-party software to assist with collecting and analyzing the data. Your informed consent will be collected through a secure online platform called Qualtrics. Western’s Qualtrics server is located in Ireland, where privacy standards are maintained under the European Union’s General Data Protection Regulation, which is consistent with Canada’s privacy legislation. Please refer to Qualtrics’ Privacy Policy (https://www.qualtrics.com/privacy-statement/) for more details about Qualtrics’ information management practices.

While there is no guarantee, we will do our best to protect the privacy of all your information by using only a study identification number for you rather than your name. Your name and e-mail will be kept securely on a master list in a secured password protected file on a computer in the research office, so we can contact you and administer the focus group. Any written information that identifies you will be kept in a locked filing cabinet in the research office. Your identity will be kept confidential in any reports or presentations that result from the study.

Focus group will be facilitated through the use of a third-party online video conferencing software called Zoom. Zoom automatically records both audio and video files. Immediately following the focus group, the video files will be destroyed. Audio files will be used for transcription and destroyed after transcription has been completed. Collected information will be kept for 7 years and then the computer file will be permanently deleted and the consent forms in the file will be shredded. Delegated institutional representatives of Western University and its
Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research in accordance with regulatory requirements.

**What are the possible risks and benefits of participating in this study?**

The risks associated with participation in the present study are low. If you experience stress while answering questions during the focus group, you may find it beneficial to utilize strategies taught in M3 related to stress reduction. Referrals to other resources will be provided if needed. While there is no guarantee, we will do our best to protect the privacy of all your information by using only a study number and not including your name in any transcription from the focus group.

A benefit of this study is that it will give you an opportunity to connect with other facilitators and community partners and debrief about your work, although it is possible that you will not experience any direct benefits by participating.

**Is participation voluntary?**

Your participation is voluntary. You may choose not to complete the focus group at any time, without consequences or having to leave the M3A program. If you decide to withdraw from the focus group, you will have the choice of whether the information that was collected prior to you leaving can still be used in the study. However, no new information will be collected without your permission. You do not waive any legal rights by signing this consent form.

**Are participants compensated for being in the study?**

Participants will not receive compensation for participation in the study.

**What are the rights of the participants?**

You have the right to not answer questions about the M3A process. You do not waive any legal rights by providing consent to participate.

**Whom do participants contact for questions?**

If you would like more information about this project, or your role in it, please contact [Name]. Concerns about your participation in this study can be forwarded to Western University’s Office of Research Ethics at [Email]. Please complete this consent form, even if you do not wish for your child and/or yourself to participate in this study.

Sincerely,

[Name]
LETTER OF INFORMATION FOR COMMUNITY PROVIDERS

Study Title: Making Mindfulness Matter (M3) © with Arabic Speaking Families

Do you confirm that you have read the Letter of Information [or the Letter of Information has been read to you] and have had all questions answered to your satisfaction?  
☐ YES  ☐ NO

Do you agree to participate in this research?  
☐ YES  ☐ NO

Do you consent to the use of unidentified quotes obtained during the study in the dissemination of this research?  
☐ YES  ☐ NO

Print Name of Participant  Signature  Date (DD-MM-YYYY)
Hello,

As part of the on-going project with the M3 Team, we would like to invite you to a focus group to reflect on your experience implementing and delivering the M3A program with Arabic speaking families. Feedback from these focus groups will be used to evaluate the process of adapting the M3 program for Arabic-Speaking families. It will help to improve family’s engagement and participation for future programing. The focus groups will be held virtually on Zoom. Please note that these meetings will be recorded, and responses will be transcribed. The M3 Team has asked that you remove your name from your zoom account and keep your camera off at all times during the meeting. This will ensure your anonymity and secure confidentiality. Participation is completely voluntary and will have no impact on your involvement with the LDA.

If interested, please respond to this email. Your email address will then be shared with Amal Baobaid from the M3 Team, who will contact you to confirm details and provide you with a Zoom Link for the meeting.

Sincerely,

The M3 Team
Appendix Q: Focus Group Questions

Study Title: Making Mindfulness Matter (M3) © with Arabic Speaking Families

1. What went well in implementing and delivering the M3A program with Arabic-speaking newcomers?
2. What can be improved when implementing and delivering the M3A program with Arabic-speaking newcomers?
3. What were barriers to referring, recruiting, and enrolling Arabic-speaking newcomer families to the M3A program?
4. What were the barriers to maintaining the involvement of families in the M3A program?
   a. What factors in the organization, community, social/political context, or other situational issues potentially affect Arabic-speaking newcomer families from attending and or participating in the program?
5. Did families enjoy the M3A curriculum and activities? Why?
6. How can we better engage with Arabic-speaking newcomer families?
   a. What time of day works best?
   b. The formatted of delivery (online or in-person)?
   c. The age of the child group (M3A ages groups are 4-10 years old, or having multiple children)?
   d. Length of time (1.5 hrs for the parent group)?
7. What aspects of the curriculum, content, activities, or program were not a good fit with Arabic-speaking newcomers?
   a. Content related to Arabic newcomer families
   b. Common scenario
   c. Activities
   d. Videos
   e. Books
8. Where are materials, family kits and handouts for Arabic-speaking newcomer families useful?
   a. Should we have more materials translated for the families
   b. Where is the translation of the material appropriate and accurate?
9. Other comments or feedback?
Appendix R: Adapted Applied Theory of Change Model (Newland, 2015) for Family Well-being
Appendix S: WREM Ethics Approval

The Western University Non-Medical Research Ethics Board (NAMREB) has reviewed and approved the WREM application form for the above mentioned study, as of the date noted above. NAMREB approval for this study remains valid until the expiry date noted above, conditional to timely submission and acceptance of NAMREB Continuing Ethics Review.

This research study is to be conducted by the investigator noted above. All other required institutional approvals and mandated training must also be obtained prior to the conduct of the study.

Documents Approved:

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<tr>
<th>Document Name</th>
<th>Document Type</th>
<th>Document Date</th>
<th>Document Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A LOI for Parents 01 10:21</td>
<td>Written Consent/Assent</td>
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<tr>
<td>Appendix C Documentation of Verbal Assent 01 10:21</td>
<td>Verbal Consent/Assent</td>
<td></td>
<td></td>
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<tr>
<td>Appendix G Mindful Parenting Pre-Post 01 10:21</td>
<td>Online Survey</td>
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<td>Appendix H Child Mindfulness Pre-Post 01 10:21</td>
<td>Online Survey</td>
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<td></td>
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<tr>
<td>Appendix J Parent Feedback Weekly Questionnaire 01 10:21</td>
<td>Online Survey</td>
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<td>Appendix J Informal Child Weekly Feedback Questionnaire 01 10:21</td>
<td>Online Survey</td>
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<td>Appendix K DASS 21 01 10:21</td>
<td>Online Survey</td>
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<td></td>
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<tr>
<td>Appendix L Family APMAR 01 10:21</td>
<td>Online Survey</td>
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<tr>
<td>Appendix M Parenting Stress Index Short Form 01 10:21</td>
<td>Online Survey</td>
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<td>Appendix N SDQ Parent Ages 4-10 01 10:21</td>
<td>Online Survey</td>
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<td>Appendix P Parent Demographic Form 03 25 21 Clean</td>
<td>Online Survey</td>
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<td></td>
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<td>Appendix R Initial Research Telephone Script 03 25 21 Clean</td>
<td>Recruitment Materials</td>
<td></td>
<td></td>
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<tr>
<td>Appendix O Feedback Questionnaire 04 01 21</td>
<td>Online Survey</td>
<td>01-Apr-2021 1</td>
<td></td>
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<tr>
<td>Appendix Q LOI for Child Assent 05 26 21</td>
<td>Written Consent/Assent</td>
<td>01-Apr-2021 2</td>
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<td>Appendix D MUC Parent Telephone Script 03 25 21 Clean</td>
<td>Recruitment Materials</td>
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No deviations from, or changes to the protocol should be initiated without prior written approval from the NAMREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.
The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,

[Signature]

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).
## Curriculum Vitae

**Name:** Amal Baobaid

**Post-secondary Education and Degrees:**

- Western University
  - London, Ontario, Canada
  - 2020-2022 M.A. School and Applied Child Psychology

- Western University
  - London, Ontario, Canada
  - 2013-2017 B. A.

**Honours and Awards:**

- Social Science and Humanities Research Council (SSHRC) Awards: 2021
  - Dean’s Honor List
    - 2015-2017
  - Criminology Academic Award
    - 2015-2016
  - King’s University College Continuing Scholarship
    - 2015-2016

**Related Work Experience:**

- Research Assistant
  - 2020-2022

- Facilitator
  - 2017-2022

- Social Support Worker
  - 2017-2020

**Publications:**