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RESEARCH ARTICLE

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Feasibility trial of the school-based STRONG intervention to promote resilience among newcomer youth

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Abstract

There are thousands of refugee students in Canadian schools and many struggle with distress and trauma symptoms. Even those not demonstrating overt distress may face adjustment challenges. This paper describes the pilot of the Supporting Transition Resilience of Newcomer Groups (STRONG) program in ten schools. STRONG is a 10-session, manualized program focused on building skills and helping students process their migration journey. This pilot used a pragmatic mixed-methods approach to evaluate the feasibility of STRONG, with a focus on acceptability, implementation, and perceived utility of the intervention. Clinicians ($n = 16$) provided data at the training, throughout the intervention and at the end through clinician surveys and focus groups. Clinicians reported high levels of acceptability for the training and program. Implementation challenges included time constraints, external influences, and some challenges with language. Overall STRONG was seen to provide significant positive benefits for students in increasing connectedness, stress management, and coping strategies. Clinicians felt that students developed more positive self-image and had improved optimism. This feasibility trial of the STRONG program indicated

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the potential utility for promoting resilience and reducing distress among refugee students through a structured, school-based group intervention.

KEYWORDS

intervention, refugees, resilience, schools, trauma

1 | INTRODUCTION

Canada's immigration numbers have increased substantially in recent years, in part due to the government's refugee resettlement initiative to support refugees during the Syrian crisis. Canada has welcomed an influx of over 100,000 refugees since 2015, nearly half of whom are children and youth (Child and Youth Refugee Research Coalition—CYRRC, 2018). Research suggests that up to 67% of refugees experience trauma premigration, and many are additionally at risk for facing adversities once resettled in Canada (Ellis, Murray, & Barrett, 2014).

Many refugee children and youth have considerable mental health needs (Durà-Vilà, Klasen, Makatini, Rahini, & Hodes, 2012; Lustig et al., 2003; Miller & Rasmussen, 2017). Premigration stressors commonly include separation from family members, direct or witnessed violence, torture, war, and death of a family member (Durà-Vilà et al., 2012). Young refugees may endure exploitation, rough living conditions in camps, and forced military recruitment (Murray, 2016). Post-migration stressors (e.g., acculturation, language barriers, uncertainty about status, lack of social support, inadequate housing, and exposure to poor parental mental health) may further increase vulnerability to mental illness or worsen existing illness (Durà-Vilà et al., 2012; Saechao et al., 2012). Implications for refugee mental health are therefore unique given that refugees experience both chronic and cumulative stressors from multiple sources. The degree to which young refugees experience distress additionally depends on social supports, resiliency, and acquired coping skills (Drury & Williams, 2012; Fazel, Reed, Panter-Brick, & Stein, 2012).

Prevalence of mental illnesses in refugee populations vary considerably due to the heterogeneity of experiences; still, reports of posttraumatic stress disorder (PTSD), depression, and anxiety are significantly greater among refugees than in the general population (Close et al., 2016; Turrini et al., 2017). Despite higher mental health needs, young immigrants and refugees are less likely to receive treatment services in comparison to nonimmigrant peers (Alegria, Vallas, & Pumariega, 2010; Kataoka, Zhang, & Wells, 2002; Rousseau & Guzder, 2008). Psychological well-being and the absence of psychological symptoms are indicators of the quality of refugee youth adaptation and are often viewed by acculturative researchers as a proxy of successful adaptation (Motti-Stefanidi, 2018). There is a need for the development of evidence-based mental health interventions for young refugees that are culturally appropriate and accessible.

In addition to addressing the mental health challenges experienced by refugee youth, interventions that foster resilience may enhance the likelihood of successful acculturation and adaptation to a new country (Masten, 2014). As with youth in other high mobility circumstances, refugee youth are subject to the diverse stressors associated with disrupted attachments, lapsed education, and acculturation to a new environment. Further, relative to their non-refugee peers, refugee youth are at significantly greater risk of exposure to other adversities associated with migration, including cultural racism (Shakya, Khanlou, & Gonsalves, 2010). Developmental and cultural understandings of resilience posit that youth who have experienced adversity will benefit from culturally contextualized and developmentally attuned interventions to enhance promotive and protective factors for successful adaptation, rather than solely interventions designed to reduce risk and pathology (Masten & Barnes, 2018; Masten, 2011, 2014). In addition to leveraging the common resilience factors for child development, including close

relationships and belongingness, problem solving and executive functioning skills, and emotional regulation, interventions to support refugee youth will benefit from culturally-based protective factors and cultural traditions increasingly being investigated (Masten, 2014; Theron, Liebenberg, & Ungar, 2015; Ungar, 2013).

Schools have been identified as an excellent setting for implementation of interventions given that schools are one of the first service systems available to refugees, offer an ideal environment for early identification of concerning behavior, and are familiar and accessible to young refugees (Eruiyar, Huemer, & Vostanis, 2018; Fazel, Garcia, & Stein, 2016; Kia-Keating & Ellis, 2007; Tyrer & Fazel, 2014). A strong evidence base exists for both school-based trauma interventions (e.g., Cognitive Behavioral Intervention for Trauma in Schools [CBITS]; Jaycox, 2003; Jaycox, Langley, & Hoover, 2018; Bounce Back; Langley, Gonzalez, Sugar, Solis, & Jaycox, 2015), and school-based resilience interventions (e.g., PENN Resiliency Program [PRP], see Brunwasser, Gillham, & Kim, 2009); however, to date there are very few empirical studies of school-based mental health interventions specifically designed to address the complex needs of refugee children and youth (Fazel, 2018). Those that do exist primarily rely on cognitive behavioral strategies to promote resilience, instill coping strategies, and improve overall functioning (Murray, Davidson, & Schweitzer, 2010; Sullivan, & Simonson, 2016; Tyrer & Fazel, 2014).

During the 2015–2016 school year, the Ontario Ministry of Education asked School Mental Health Ontario to monitor and address the mental health needs of students arriving in Canadian schools from Syria and other countries. A number of universal welcoming measures were put in place in schools across the province (i.e., Tier 1 initiatives). Within a multi-tiered intervention framework, Tier 2 interventions are targeted prevention for students at risk or early intervention for those showing signs of adjustment difficulties (Fazel, Hoagwood, Stephan, & Ford, 2014). Over time, referral patterns and requests from school mental health leads identified a need for Tier 2 programming for students with refugee backgrounds. That is, the existing Tier 1 initiatives were not enough, and many children and youth were exhibiting mild to moderate indicators of distress. There has been a recent call to action to research and produce evidence-informed Tier 2 interventions (Mitchell, Stormont, & Gage, 2017). Accordingly, the Supporting Transition Resilience of Newcomer Groups (STRONG) program, a manualized group intervention for primary and secondary students, was developed for implementation in schools.

Bowen et al. (2009) note conditions under which feasibility studies might be warranted, several of which apply to STRONG. Specifically, feasibility studies are useful when partnerships need to be established, increased or sustained, there are few previously published studies, and the population has been shown empirically to have unique considerations (Bowen et al., 2009). Because there is a lack of programs for newcomer youth that have been developed and implemented in a Canadian context and because structured Tier 2 school-based group interventions are almost non-existent in this province, there is a need to assess the feasibility of STRONG before moving to a more rigorous evaluation of outcome. The purpose of this paper was to explore the feasibility of a school-based group intervention for refugee children and youth; specifically, we explored the feasibility domains of acceptability, implementation, and perceived utility (Bowen et al., 2009). We worked from a pragmatic mixed-methods framework (Feilzer, 2010; Greene & Caracelli, 1997) utilizing clinician training surveys, focus group data, and implementation surveys.

2 | METHOD

2.1 | Participants

Ten STRONG groups were implemented across two school districts. Groups were held during school hours and typically held weekly (except when a school break or other disruption necessitated a skipped week followed by two sessions in 1 week to catch up). The groups varied concerning size, co-facilitation, composition, and use of interpreters, as shown in Table 1. Consistent with local practice and procedures, clinicians had autonomy over how to schedule the program, which age group to target, and how to identify and recruit students. Eligibility criteria

TABLE 1 Characteristics of pilot groups

Division	Group size	Co-facilitator ^a	Gender	Age range	Language/interpreter use
Primary	5	No	All male	8–9	English was primarily spoken/some use of interpreter
Primary	5	Yes (ELL teacher ^b)	All male	12–14	English was spoken/no use of interpreter
Primary	6	Yes	All male	9–12	Equal combination of English and use of interpreter
Primary	6	Yes	4 Males/2 females	10–12	English was primarily spoken/some use of interpreter
Secondary	4	Yes	All male	14–16	English was spoken/no use of interpreter
Secondary	5	Yes	2 Males/3 females	15–18	English was spoken/no use of interpreter
Secondary	6	Yes	All female	15–17	English was primarily spoken/some use of interpreter
Secondary	7	Yes (settlement worker ^c)	4 Males/3 females	14–18	English was primarily spoken/some use of interpreter/settlement worker spoke Arabic
Secondary	9	Yes	7 Males/2 females	15–20	English was spoken/no use of interpreter
Secondary	9	Yes	All female	15–19	No English/everything was interpreted/social worker spoke Arabic

^aCo-facilitated groups involved two school mental health professionals working in school districts (i.e., social workers and/or psychologists unless otherwise noted).

^bEnglish language learner (ELL) teachers (also referred to as ESL teachers).

^cSettlement workers are not school district employees but work within schools to provide adjustment support to immigrants and their families.

included students who had migrated to Canada within the past 6 months to 5 years, and who were experiencing psychological distress or difficulties coping. No formal measures of distress or coping were collected for the purpose of this feasibility trial, so the determination of these criteria were made by clinicians based on input from students, families, and educators. Clinicians were also encouraged to follow general group selection considerations (e.g., exclude students exhibiting acute suicidality, presenting risk to others, or too disruptive to engage effectively in a group).

Seven of the groups included youth from diverse regions and cultures, and the other three were more homogenous concerning the region of origin (or even a single country). A couple of students had been in Canada for less than a year, but most had resided in the country for at least a year (and in one case, 4 years). In a few groups, there was a language and country of origin match between students and their clinician, but the extent and impact of this matching were not studied.

2.2 | Intervention

The STRONG intervention is a 10-session manualized approach that aims to strengthen newcomer (i.e., immigrant and refugee) students' resilience following their transition to Canada. The program was developed to meet the needs of both immigrant and refugee students, given the overlap in both risk and protective factors for these groups. STRONG was designed to promote individual strengths and coping skills, and provide a positive sense of self and belonging (see Appendix for an outline of session content). All group sessions begin with warm-up activities specifically designed to promote school connectedness and social inclusion (e.g., identifying commonalities among peers) and cultural identity (e.g., sharing rituals, foods, and traditions from home country). Several sessions draw on cognitive behavioral therapy approaches that have been demonstrated to be effective with school-based intervention for trauma in general (Allison & Ferreira, 2017; Hoover et al., 2018; Ngo et al., 2008) and with refugee and immigrant students (Sullivan & Simonson, 2016; Tyrer & Fazel, 2014). Students practice coping skills throughout and between sessions, including relaxation, measuring and managing distress, and cognitive coping.

In addition to the group sessions, clinicians facilitate an individual session with each participant to help them process their journey narrative. This individual session has elements of processing a trauma narrative but is not focused on one particular trauma. During the 1-hr individual session, clinicians lead students through a series of questions designed to elicit the students' experiences in their home country as well as during migration and post-migration. Clinicians help students tell their stories in a way that is both cohesive and strengths-focused and support students in choosing a part of their narrative to share with the rest of the group. During the individual session, clinicians also screen students for PTSD to facilitate referrals to community-based services as indicated. Participants subsequently share parts of their journey narrative with the larger group. Clinicians are also encouraged to facilitate a parent meeting and an educator meeting as part of the intervention. There are separate manuals for primary (kindergarten to grade 8) and secondary (grades 9–12) students to ensure that activities match the developmental stage of students. Core concepts and strategies are similar across the two manuals, though there are adaptations for developmental attunement. For example, the primary manual uses more pictorial and less verbal content, examples and illustrations are designed to match the age of participants, and the secondary manual content includes activities that require more higher-order thinking (e.g., more analysis and evaluative steps for problem solving and cognitive coping).

Conceptually, STRONG is based on an understanding of the refugee experience and related mental health challenges within a multisystem, ecosocial framework (Bronfenbrenner, 1992). This reflects a more contemporary and holistic model of the newcomer experience than traditional trauma-focused psychotherapeutic approaches, conceptualizing mental health challenges as a consequence of the myriad environmental

stressors and supports available to newcomers throughout their journey instead of as the result of innate or intrapsychic challenges. Accordingly, the intervention approach is characterized by elements of understanding and restoring the social ecology of student participants, including sociotherapy techniques inherent to the group therapy process, as well as cognitive behavioral techniques designed to reduce psychological distress and promote resilience through skill acquisition and practice. STRONG content and structure were also informed by the experiences of the development team with other Tier 2 school-based interventions, most prominently CBITS (Jaycox, 2003; Jaycox et al., 2018), a 10-session group-based cognitive behavioral intervention designed to treat posttraumatic stress in schools. It has been widely implemented across several nations with good evidence for its acceptability, feasibility, and positive impact on psychosocial and academic functioning.

STRONG was co-developed with and reviewed by members of the newcomer community and several experts in the fields of education and mental health, with specific expertise in school mental health, adversity and trauma, refugee mental health, and resilience. To inform cultural relevance of STRONG, input was sought throughout intervention development from the newcomer community, including engagement in regular "newcomer mental health rounds" with Ontario school districts to determine priority areas for content and related resource development. In addition, the development team included several members with lived immigrant and refugee experience who consistently provided their input on how to ensure culturally responsive and meaningful content and process.

The intervention was implemented by licensed school mental health professionals, which include social workers, and clinical and school psychologists. Demographics for the clinicians ($n = 16$) as reported in the training feedback survey showed that most were female (87.5%). All clinicians attended a 2-day training. The training was co-developed and implemented with a mental health professional who is herself a Syrian refugee and who provided background and context setting for STRONG trainees. Training modules included background information about patterns of migration and settlement in Canada, trauma in general, trauma specific to migration, and an orientation to the program manual. Groups then split into primary and secondary groups to walk through each session of the manual. Opportunities to practice facilitation were included. There was also a demonstration of the individual narrative session, followed by opportunities to practice.

Clinicians implemented their intervention groups between April and June 2018. Clinicians were invited to participate in voluntary weekly consultation calls that addressed both clinical and implementation issues. They were also able to access support from their district's Mental Health Leader, a senior mental health professional responsible for coordinating the district mental health strategy (Short, 2016). Clinicians were provided with implementation guidelines but had autonomy over their decisions consistent with a provincial commitment to implementation-sensitive practices (i.e., practices that are robust and can be tailored to individual contexts; Weist et al., 2017).

2.3 | Measures and procedure

Data were collected from clinicians at every stage of the pilot from clinician training, through implementation, to post-implementation reflection.

2.3.1 | Training feedback questionnaires

Clinicians completed a 27-item survey designed for this pilot. It included Likert scale ratings, open-ended questions, and retrospective pre- and post-questions asking clinicians to reflect on their knowledge (e.g., "I understand the mental health needs of newcomer students") and self-efficacy (e.g., "I am confident I can teach newcomer students about common reactions to stress").

2.3.2 | Implementation surveys

Clinicians completed a 58-item online implementation survey after finishing the program. The survey included rating scales and open-ended questions that addressed group characteristics (e.g., Was there anything about the composition of this particular group that had an impact on your ability to deliver the program as intended?), implementation successes and challenges (e.g., Were there any challenges related to the use of an interpreter?; Do you have any advice or tips about effective use of an interpreter?), and perceived benefits for students and clinicians (e.g., In your opinion, to what extent did participants develop optimism for the future?). There were ten surveys completed representing nine groups.

2.3.3 | Focus groups

Two focus groups were conducted with clinicians at the end of the school year at the school district offices ($n = 7$ and $n = 8$). Although a couple of clinicians were not able to attend the focus groups, all STRONG groups were represented (i.e., had at least one co-facilitator present). Focus groups followed a semi-structured format with questions to identify strengths and challenges of the pilot (e.g., Overall, what was the biggest successes of the STRONG pilot in your schools? Are there any recommendations you have for changes to the program or the process for next year?). Focus group facilitators were flexible in following up on new areas introduced by participants. Focus groups lasted approximately 90 min and were audio-recorded and transcribed. All measures are available from the first author.

2.4 | Data analysis

Qualitative data from focus groups and open-ended questions on the training and implementation survey were coded in several cycles by two coders, using thematic analysis (Braun & Clarke, 2006). First cycle coding included identifying any quotes related to acceptability, implementation, and perceived impact, and assigning broad categories (e.g., relationships, skills). Second cycle coding identified child codes within these broader categories, in particular, the category of perceived impact (e.g., connectedness to clinicians, connectedness to peers). The third author generated the initial codebook in close consultation with the first author and any ambiguous codes were discussed and coded using a consensus-based approach at regular meetings throughout the coding process. We also looked explicitly for any mention of null or negative outcomes. The codes were then reviewed to identify themes, and illustrative quotes were chosen for each theme. Quantifiable data were analyzed descriptively in SPSS. Clinicians' responses on the retrospective pre-post training survey items were analyzed using paired samples *t* tests.

All evaluation protocols were approved by Western University's Research Ethics Board. In addition, both school districts provided approval through their external research application processes. Clinicians provided written consent to participate in the study.

3 | RESULTS

In this section, we present our results organized by specific feasibility domains including acceptability (of training for clinicians and the program itself), implementation (including successes and challenges), and perceived utility of the program.

3.1 | Acceptability of training and program

Clinicians completed the survey after the 2-day training. The difference in their retrospective pre-test ratings and post-test ratings of knowledge and self-efficacy was significant ($M = 3.07$, $SD = 0.41$ compared to $M = 3.70$, $SD = 0.33$; $t(15) = -6.58$, $p < .001$.) This perceived gain is notable because these were experienced clinicians with prior training in cognitive behavioral therapy (CBT). In addition, 40% reported that they had experience utilizing CBT approaches with traumatized youth. Furthermore, the clinicians as a group were very experienced (range of experience = 6–33 years).

Open-ended questions on the feedback training survey focused on the most valuable aspects of the training, as well as any concerns that clinicians had about implementing the program. Based on the clinicians' responses, valuable aspects included specific aspects of the training (i.e., activities, trainers), general program materials, narrative role plays, knowledge and new skills gained, networking, and increased confidence. At the same time, results showed that 87.5% of clinicians identified concerns about implementing the program at the time of training. The projected timeline for the STRONG program was the most prevalent concern (identified by 81% of clinicians). Other concerns included support (13%), finding participants (13%), language barriers (13%), and materials (6%).

Clinicians rated the program implementation as a positive experience and indicated that they would recommend it to colleagues ($M = 4.9$, $SD = 0.32$) for both questions on a 5-point scale from *not at all* to *very much*. The focus groups also highlighted the engaging nature of the program at both the elementary and secondary levels as a theme:

...the student engagement with the activities, just how they kind of all came together as a group. You could really see the relationships kind of developing. So I thought that was really positive amongst them and they actually- they really looked forward to coming. So you could tell that, just again amongst, as a group, and just the activities they were really looking forward to and always eager and excited to participate.

(Elementary clinician, focus group)

Clinicians additionally noted high attendance as an indicator of good engagement and acceptability among students:

The kids came every single time, even when they had expressed that they had other things, or assignments, or ISU's, or something else was really falling apart. I was thinking, "oh so and so's not going to come because I know this, and this is happening for her." And boom there she is. I'm like, "Welcome." So really I think it really spoke to- I think they found it really helpful just to be with each other...

(Secondary clinician, focus group)

The mean number of sessions attended for primary and secondary students was nine and eight, respectively.

When asked specifically about the acceptability of the individual journey narrative sessions, clinicians felt that they were positive and important:

They were powerful for all involved and positive overall. Provided opportunity to better understand and develop a more holistic view of students and also strengthened the relationships between facilitators and students. The students seemed to appreciate having opportunity to talk about their experiences and also for someone to ask them and be curious.

(Secondary clinician, implementation survey)

3.2 | Implementation

Overall, clinicians indicated that they were able to complete all of the activities and sessions (with some modifications in a few groups). However, they identified several implementation challenges during focus groups and on implementation surveys including timeframes being difficult to meet, external influences, and students' understanding of the concepts. First, this entire pilot was conducted in a very condensed timeframe. Training for clinicians occurred in late March, after which clinicians had to identify and recruit participants, develop relationships with families, obtain guardian consent, and implement the 10-session program (in addition to individual sessions) before the end of the school year in late June. Findings suggested that simply starting earlier in the year would lead to more success, in part because the STRONG program could be planned as part of the clinicians' workload for the year. One clinician said:

...obviously just not enough time to do this properly as intended or hoped. Just logistically getting a bunch of teenagers to do things really quickly and get paperwork back on time is not going to happen. They love coming, they love attending, they love participating. Paperwork not happening. So that was challenging. We didn't have language because...I don't believe I would have been able to do even half the sessions if I needed to try to get an interpreter in my language and in time...So yeah logistics, just paperwork back. Not enough time. I think doing it in high school where you're not just negotiating with one teacher, you're negotiating with let's say five students, times four teachers, times whatever.

(Secondary clinician, focus group)

Secondly, various external influences made implementation challenging, such as disruptions during the sessions (e.g., teachers knocking on the door looking for students), certain events that interfered with the planned time to hold the group (e.g., Ride for Cancer), and Ramadan (i.e., a holy month for Muslims during which observers abstain from consuming food and water from sunrise to sunset) taking place during the implementation period.

Lastly, the language required for the group was indicated as being a challenge, particularly among primary clinicians. Some groups had access to interpreters, and some had a clinician that spoke the same language as the students. Other clinicians reported that the groups were largely conducted in English, with the use of peer interpretation as needed. Beyond simply understanding the meaning of particular words, some of the concepts were difficult either because of the developmental stage of the students and/or cultural context. Some clinicians also felt there was simply too much material for each session.

3.3 | Perceived utility of the intervention

The final feasibility domain addressed was the perceived utility of the intervention (Bowen et al., 2009). We identified three main themes related to perceived utility in our qualitative data, including increased connectedness among students, improved stress management and coping skills, and a more positive outlook. Main themes are presented with exemplar quotes.

Social support and connectedness are known protective factors for refugee youth (Fazel et al., 2012; Khawaja, Allan, & Schweitzer, 2018). The STRONG clinicians viewed the positive connections developed by students as a major impact of the intervention. All clinicians who completed an implementation survey agreed that students supported each other, and 90% of clinicians believed that students developed a cohesive group experience. As one primary clinician noted in the focus group, "Even though some of them do live in the same buildings, they didn't know each other. So, it's nice at school to see some of them now buddying up together and playing together."

The secondary school clinicians also noted the cohesiveness and support among group participants:

A lot of them live in some of the same apartment blocks but weren't necessarily friends or didn't really know each other that well. But really feeling connected and you could see especially in our last session with the celebration how they all came together wanting to bring food and even though we said that we would provide the food. That was very important to them.

(Secondary clinician, focus group)

Another benefit of STRONG was the connections formed between the students and clinicians. It was apparent that students felt clinicians were safe adults with whom they could express their concerns and access support.

And then for me, I didn't realize the impact we were having on them in terms of our relationship with them, and theirs with ours, until they started to say certain things and you know invite us to come over to their home, and I was like, "oh like they are feeling connected to us as well," because I was watching it happen amongst them but, I hadn't really realized the impact that we were also having.

(Secondary clinician, focus group)

In some cases, the clinicians noted explicitly that they connected with youth who would not otherwise have been part of their caseloads:

...it was neat watching them grow as a group and I wouldn't have known four of the five kids had we not run the group, and again a few of them came with a few things or would pop in and say hi and that was a neat dynamic to see for kids who are maybe not typically ones who would be referred to social work for example.

(Primary clinician, focus group)

Clinicians also observed that some students were beginning to feel more comfortable at school and were developing a sense of belonging in the school community, which are important protective factors (Kia-Keating & Ellis, 2007). Specifically, students approached teachers more regularly for guidance, and signed up for clubs or teams at school. A secondary clinician spoke about a specific student in a focus group, stating "... she did really start to talk about accessing outside support. She really did begin to really use guidance from this teacher and that teacher, and this club." Another clinician said:

I also noticed at that the end and I don't know if this fits in there, but as we went along, around goals and around different things that can be strengths in your outer circle, and they started to access more extra-curricular school stuff.

(Secondary clinician, focus group)

Beyond connectedness, students developed specific skills related to stress management and coping. All clinicians agreed (*somewhat to very much*) that students learned both about the impact of stress and the thoughts–feelings–behavior triad. Furthermore, 90% of the clinicians agreed (*somewhat to very much*) that students learned relaxation strategies, learned positive self-talk, and processed their journey narratives. Clinicians shared that students were using specific skills and strategies that they learned outside of the group:

Especially around things in the mindfulness exercises... some girls shared that they've been using the breathing exercises more. Right now it's been actually helping to calm them down. One student shared in the entire session of problem-solving and the steps we take, and she shared an actual personal example

where she had to use the steps and do the pros and cons and how that helped her to make the proper choice that best fitted her right now.

(Secondary clinician, focus group)

Finally, reports from clinicians suggested that the STRONG program appeared to change the way that students viewed themselves and their future. Specifically, 90% of clinicians agreed (somewhat to very much) that students developed optimism for the future. In focus groups, clinicians stated that students were able to reflect on their journey using a strengths-based approach and reframed their view of themselves to be more positive and stronger:

So, I think it kind of gave them some insight into their journey and what a challenge it was, "but look I survived this." And how brave they are in terms of being able to manage all of the challenges that they've had because they've had a lot of challenges in their journey. And that they have survived it and that look, we're sitting here today. You're in school, you are managing, right, so it kind of reinforces to them that they have some of those strengths even though they might not have known that they have those strengths to survive.

(Secondary clinician, focus group)

One of my students, I noticed from when she first came here...she kind of, she just physically looked sad, and down, and then throughout the group and towards the end, she really shared that this never happened in Chicago or even back home...And she said, "I've been to so many different places. I wasn't expecting to make connections. I wasn't expecting people to care about me. I wasn't expecting any of this..." So even just her well-being and her mindset from day one to the end of school was a complete shift and there was hope for her.

(Secondary clinician, focus group).

4 | DISCUSSION

The purpose of this feasibility trial was to document the acceptability, implementation, and perceived utility of a new school-based resilience intervention for refugee students. Overall, the study findings suggest that the approach is feasible, although clearly more attention is warranted on some of the implementation challenges. Implementation issues are particularly important within the Ontario context, where there has been a relative lack of structured Tier 2 interventions. Thus, not only are clinicians and other school stakeholders exploring how to fit STRONG into their contexts, they are also still learning how to structure and implement these interventions in general. Stakeholders have previously identified the importance of attending to design and system considerations when implementing programming for newcomer students (Crooks, Smith, Robinson-Link, Orenstein, & Hoover, 2020).

Our results indicated high levels of acceptability. Clinicians rated their satisfaction with the training highly and most felt well prepared to implement the program, which is important because adequate training for service providers has been identified as an important component of mental health services for refugee children and youth (Eruyar et al., 2018). Clinicians reported good attendance of students and that the students appeared engaged. Furthermore, clinicians felt that students both enjoyed and benefited from the individual journey narrative sessions. Overall, clinicians regarded the perceived utility of the intervention favorably, and the impact they most clearly articulated was increased connectedness of students, consistent with the relational approach described by Juang et al. (2018).

There are some methodological limitations that provide important context for the findings of this study. The sample size was small, both in terms of the number of groups and with respect to the number of individuals providing data. The groups were diverse, but it was still a relatively small number upon which to draw conclusions. Also, age and gender of the groups were somewhat confounded in that there were some all-boys primary groups (with particularly young students) and some all-girls secondary school groups, but not vice versa. Thus, it is difficult to disentangle whether some of the activities worked better for boys versus girls or primary versus secondary students. Due to time constraints we had to rely on clinician perspectives without youth voice gathered directly; clearly, adding youth outcome data will be an important next step in exploring the utility of this intervention. Our clinician measures were developed to match the objectives and activities of this intervention, as well as the specific feasibility focus; as such, no psychometric data are available. Also, there were no data collected on fidelity to the intervention model (beyond self-reported tracking sheets). This is an important future direction because recent research has shown that clinicians may have numerous beliefs that prevent effective use of CBT (Wolitzky-Taylor et al., 2018). In addition, we did not systematically collect information about the “match” between country or language of origin between clinicians and students, and therefore are unable to describe the extent or impact of this matching. We did not have access to specific demographic details, including how long individual students had been in Canada.

Beyond specific methodological limitations, it is important to note that the entire pilot was conducted in a very condensed timeframe. Not only was the project started late in the school year, but, because the opportunity was not known to clinicians at the outset of the school year, there was no accommodation for this project in their negotiated workloads.

5 | CONCLUSION

In conclusion, the data collected through this mixed-methods feasibility pilot of the STRONG program provided evidence that there is merit to further refinement and evaluation. Future evaluation would be strengthened with youth self-report measures and focus groups. In addition, there is a need to better understand and document the characteristics of students referred to the group (e.g., country of origin, proficiency with English, length of time in the country); we have subsequently developed a structured referral form that is now being implemented in the schools that will allow us to better track these details and evaluate whether particular student characteristics are associated with better outcomes. Nonetheless, this pilot provided guidance about outcomes that might be most useful to measure. In particular, clinicians emphasized observing increases in connectedness, use of stress management and coping skills, and overall well-being and resilience. Clearly once the program has been finalized, and additional pilot data are gathered, there is a need to move toward more rigorous evaluation, potentially through a waitlist comparison design. Consistent with other research, school was viewed as a favorable place to receive intervention (Fazel et al., 2016). This pilot evaluation provided evidence that school-based group intervention for refugee children and youth is a feasible approach with a potentially significant positive impact and an area that warrants further study.

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CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

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REFERENCES

- Alegria, M., Vallas, M., & Pumariega, A. J. (2010). Racial and ethnic disparities in pediatric mental health. *Child and Adolescent Psychiatric Clinics*, 19(4), 759–774. <https://doi.org/10.1016/j.chc.2010.07.001>
- Allison, A. C., & Ferreira, R. J. (2017). Implementing cognitive behavioral intervention for trauma in schools (CBITS) with Latino youth. *Child and Adolescent Social Work Journal*, 34(2), 181–189. <https://doi.org/10.1007/s10560-016-0486-9>
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., ... Fernandez, M. (2009). How we design feasibility studies. *American Journal of Preventive Medicine*, 36(5), 452–457. <https://doi.org/10.1016/j.amepre.2009.02.002>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Bronfenbrenner, U. (1992). *Ecological systems theory*. London, UK: Jessica Kingsley Publishers.
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009). A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, 77(6), 1042–1054. <https://doi.org/10.1037/a0017671>
- Child and Youth Refugee Research Coalition (CYRRC). (2018). Demographic and socioeconomic characteristics. CYRRC. <http://cyrrc.org/data-aggregation/demographic-socioeconomic-characteristics/>
- Close, C., Kouvonen, A., Bosqui, T., Patel, K., O'Reilly, D., & Donnelly, M. (2016). The mental health and wellbeing of first generation migrants: A systematic-narrative review of reviews. *Globalization and Health*, 12(1), 47. <https://doi.org/10.1186/s12992-016-0187-3>
- Crooks, C. V., Smith, A. C. G., Robinson-Link, N., Orenstein, S., & Hoover, S. (2020). Psychosocial interventions in schools with newcomers: A structured conceptualization of system, design, and individual needs. *Child and Youth Services Review*, 112.
- Drury, J., & Williams, R. (2012). Children and young people who are refugees, internally displaced persons or survivors or perpetrators of war, mass violence and terrorism. *Current Opinion in Psychiatry*, 25(4), 277–284. <https://doi.org/10.1097/YCO.0b013e328353eeae6>
- Durà-Vilà, G., Klasen, H., Makatini, Z., Rahini, Z., & Hodes, M. (2012). Mental health problems of young refugees: Duration of settlement, risk factors, and community-based interventions. *Clinical Child Psychology and Psychiatry*, 18(4), 604–623. <https://doi.org/10.1177/1359104512462549>
- Ellis, B. H., Murray, K., & Barrett, C. (2014). Understanding the mental health of refugees: Trauma, stress, and the cultural context. In P. Ranna (Ed.), *The Massachusetts General Hospital textbook on diversity and cultural sensitivity in mental health* (pp. 165–187). Totowa, NJ: Humana Press. https://doi.org/10.1007/978-3-030-20174-6_13
- Eruyar, S., Huemer, J., & Vostanis, P. (2018). How should child mental health services respond to the refugee crisis? *Child and Adolescent Mental Health*, 23(4), 303–312. <https://doi.org/10.1111/camh.12252>
- Fazel, M. (2018). Psychological and psychosocial interventions for refugee children resettled in high-income countries. *Epidemiology and Psychiatric Sciences*, 27(2), 117–123. <https://doi.org/10.1017/S2045796017000695>
- Fazel, M., García, J., & Stein, A. (2016). The right location? Experiences of refugee adolescents seen by school-based mental health services. *Clinical Child Psychology and Psychiatry*, 21(3), 368–380. <https://doi.org/10.1177/1359104516631606>
- Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2014). Mental health interventions in schools in high-income countries. *The Lancet Psychiatry*, 1(5), 377–387. [https://doi.org/10.1016/S2215-0366\(14\)70312-8](https://doi.org/10.1016/S2215-0366(14)70312-8)
- Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: Risk and protective factors. *The Lancet*, 379(9812), 266–282. [https://doi.org/10.1016/S0140-6736\(11\)60051-2](https://doi.org/10.1016/S0140-6736(11)60051-2)
- Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4(1), 6–16. <https://doi.org/10.1177/1558689809349691>
- Greene, J. C., & Caracelli, V. J. (1997). Defining and describing the paradigm issue in mixed-method evaluation. In J. C. Caracelli & V. J. Greene (Eds.), *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms* (New Directions for Evaluation, No. 74) (pp. 5–17). San Francisco: Jossey-Bass.

- Hoover, S. A., Sapere, H., Lang, J. M., Nadeem, E., Dean, K. L., & Vona, P. (2018). Statewide implementation of an evidence-based trauma intervention in schools. *School Psychology Quarterly*, 33(1), 44–53. <https://doi.org/10.1037/spq0000248>
- Jaycox, L. (2003). *CBITS: Cognitive-behavioral intervention for trauma in schools*. Longmont, CO: Sopris West Educational Services.
- Jaycox, L. H., Langley, A. K., & Hoover, S. A. (2018). *Cognitive behavioral intervention for trauma in schools (CBITS)* (2nd ed.). Santa Monica, CA: RAND Corporation.
- Juang, L. P., Simpson, J. A., Lee, R. M., Rothman, A. J., Titzmann, P. F., Schachner, M. K., ... Betsch, C. (2018). Using attachment and relational perspectives to understand adaptation and resilience among immigrant and refugee youth. *American Psychologist*, 73(6), 797–811. <https://doi.org/10.1037/amp0000286>
- Kataoka, S. H., Zhang, L., & Wells, K. B. (2002). Unmet need for mental health care among US children: Variation by ethnicity and insurance status. *American Journal of Psychiatry*, 159(9), 1548–1555. <https://doi.org/10.1176/appi.ajp.159.9.1548>
- Khawaja, N. G., Allan, E., & Schweitzer, R. D. (2018). The role of school connectedness and social support in the acculturation in culturally and linguistically diverse youth in Australia. *Australian Psychologist*, 53(4), 355–364. <https://doi.org/10.1111/ap.12327>
- Kia-Keating, M., & Ellis, B. H. (2007). Belonging and connection to school in resettlement: Young refugees, school belonging, and psychosocial adjustment. *Clinical child psychology and psychiatry*, 12(1), 29–43. <https://doi.org/10.1177/1359104507071052>
- Langley, A. K., Gonzalez, A., Sugar, C. A., Solis, D., & Jaycox, L. (2015). Bounce back: Effectiveness of an elementary school-based intervention for multicultural children exposed to traumatic events. *Journal of Consulting and Clinical Psychology*, 83(5), 853–865. <https://doi.org/10.1037/ccp0000051>
- Lustig, S. L., Kia-Keating, M., Grant-Knight, W., Geltman, P., Ellis, H., Birman, D., ... Saxe, G. (2003). *Review of child and adolescent refugee mental health: White paper from the National Child Traumatic Stress Network Refugee Trauma Task Force*. Boston, MA: US Department of Health and Human Services.
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology*, 23(2), 493–506. <https://doi.org/10.1017/S0954579411000198>
- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6–20. <https://doi.org/10.1111/cdev.12205>
- Masten, A. S., & Barnes, A. J. (2018). Resilience in children: Developmental perspectives. *Children*, 5(7), 98. <https://doi.org/10.3390/children5070098>
- Miller, K. E., & Rasmussen, A. (2017). The mental health of civilians displaced by armed conflict: An ecological model of refugee distress. *Epidemiology and Psychiatric Sciences*, 26(2), 129–138. <https://doi.org/10.1017/S2045796016000172>
- Mitchell, B. S., Stormont, M., & Gage, N. A. (2017). Tier two interventions implemented within the context of a tiered prevention framework. *Behavioral Disorders*, 36(4), 241–261. <https://doi.org/10.1177/019874291103600404>
- Motti-Stefanidi, F. (2018). Resilience among immigrant youth: The role of culture, development and acculturation. *Developmental Review*, 50, 99–109. <https://doi.org/10.1016/j.dr.2018.04.002>
- Murray, J. S. (2016). Displaced and forgotten child refugees: A humanitarian crisis. *Journal for Specialists in Pediatric Nursing*, 21(1), 29–36. <https://doi.org/10.1111/jspn.12133>
- Murray, K. E., Davidson, G. R., & Schweitzer, R. D. (2010). Review of refugee mental health interventions following resettlement: Best practices and recommendations. *American Journal of Orthopsychiatry*, 80(4), 576–585. <https://doi.org/10.1111/j.1939-0025.2010.01062.x>
- Ngo, V., Langley, A., Kataoka, S. H., Nadeem, E., Escudero, P., & Stein, B. D. (2008). Providing evidence-based practice to ethnically diverse youths: Examples from the Cognitive Behavioral Intervention for Trauma in Schools (CBITS) program. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47(8), 858–862. <https://doi.org/10.1097/CHI.0b013e3181799f19>
- Rousseau, C., & Guzder, J. (2008). School-based prevention programs for refugee children. *Child and Adolescent Psychiatric Clinics of North America*, 17(3), 533–549. <https://doi.org/10.1016/j.chc.2008.02.002>
- Saechao, F., Sharrock, S., Reicherter, D., Livingston, J. D., Aylward, A., Whisnant, J., & Kohli, S. (2012). Stressors and barriers to using mental health services among diverse groups of first-generation immigrants to the United States. *Community Mental Health Journal*, 48(1), 98–106. <https://doi.org/10.1007/s10597-011-9419-4>
- Shakya, Y. B., Khanlou, N., & Gonsalves, T. (2010). Determinants of mental health for newcomer youth: Policy and service implications. *Canadian Issues: Immigrant Mental Health*, (Summer 2010), 98–102.
- Short, K. H. (2016). Intentional, explicit, systematic: Implementation and scale-up of effective practices for supporting student mental well-being in Ontario schools. *International Journal of Mental Health Promotion*, 18(1), 33–48. <https://doi.org/10.1080/14623730.2015.1088681>
- Sullivan, A. L., & Simonson, G. R. (2016). A systematic review of school-based social-emotional interventions for refugee and war-traumatized youth. *Review of Educational Research*, 86(2), 503–530. <https://doi.org/10.3102/0034654315609419>

- Theron, L., Liebenberg, L., & Ungar, M. (2015). *Youth resilience and culture*. Dordrecht, the Netherlands: Springer.
- Turrini, G., Purgato, M., Ballette, F., Nosè, M., Ostuzzi, G., & Barbui, C. (2017). Common mental disorders in asylum seekers and refugees: Umbrella review of prevalence and intervention studies. *International Journal of Mental Health Systems*, 11(1), 51. <https://doi.org/10.1186/s13033-017-0156-0>
- Tyrer, R. A., & Fazel, M. (2014). School and community-based interventions for refugee and asylum seeking children: A systematic review. *PLOS One*, 9(2):e89359. <https://doi.org/10.1371/journal.pone.0089359>
- Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence & Abuse*, 14(3), 255–266. <https://doi.org/10.1177/1524838013487805>
- Weist, M. D., Bruns, E. J., Whitaker, K., Wei, Y., Kutcher, S., Larsen, T., ... Short, K. H. (2017). School mental health promotion and intervention: Experiences from four nations. *School Psychology International*, 38(4), 343–362. <https://doi.org/10.1177/0143034317695379>
- Wolitzky-Taylor, K., Fenwick, K., Lengnick-Hall, R., Grossman, J., Bearman, S. K., Arch, J., ... Chung, B. (2018). A preliminary exploration of the barriers to delivering (and receiving) exposure-based cognitive behavioral therapy for anxiety disorders in adult community mental health settings. *Community Mental Health Journal*, 54(7), 899–911. <https://doi.org/10.1007/s10597-018-0252-x>

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APPENDIX

Outline of STRONG sessions

Session 1: My Inside Strengths and Outside Supports—affirmation of cultural identity including mapping of cultural assets; identification of existing internal strengths and coping skills; mapping of existing social relationships and discussion of developing and maintaining healthy relationships and social supports to foster social inclusion; mapping of family, school, and community connections.

Session 2: Understanding Stress—defining and normalizing stress, and introduction to coping skills, including relaxation.

Session 3: Common Stress Reactions and Identifying Feelings—continued normalization of and promotion of coping skills related to stress, including stress that arises from experiencing adversity, violence, and discrimination related to the refugee and newcomer experiences.

Session 4: Measuring and Managing Feelings—emotional regulation skills, including feelings identification and measurement.

Session 5: Using Helpful Thoughts—emotional regulation skills and coping skills, including cognitive coping to identify and address unhelpful thoughts.

Session 6: Steps to Success—coping skills to break down challenges into manageable steps and minimize avoidance by using “SMART” goals (specific, measurable, achievable, relevant, timed).

Session 7: Problem Solving—problem-solving skills to address daily problems, including those specific to the refugee and newcomer experiences.

Sessions 8 and 9: My Journey Parts I and II—sharing components of student migration journey, including how students have encountered and addressed adversity, violence, and discrimination related to the refugee and newcomer experiences; planning for future, including fostering of school and peer connections.

Session 10: Graduation—review of student achievements throughout STRONG participation, including development of social and emotional skills and coping skills to support their resilience as they transition to a new school and community; identification of new and strengthened social and school supports.