Variations in perceived stress among Syrian refugee parents resettled through different sponsorship programs in Canada

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ABSTRACT

Background: Little is known about the perceived stress level of Syrian Refugee (SR) parents residing in Canada specifically in relation to different sponsorship programs. This study aims to assess the relationship between the different sponsorship programs [Government-Assisted Refugees (GAR), Privately Sponsored Refugees (PSR) and Blended Visa Office-Referred refugees (BVOR)] and perceived stress among SR parents, with at least one child under the age of four, who resettled in the Greater Toronto area after 2015.
Methods: A convenience sample of 155 Syrian Refugee (SR) parents was recruited. Perceived levels of stress were measured using the Perceived Stress Scale (PSS-10). Multiple linear regression analysis was performed to assess the independent relation between several types of sponsorship programs and PSS adjusting for demographic, economic and social factors.
Results: The overall average PSS score was found to be 12.5 ± 7.2 with BVORs presenting the highest level of moderate stress when compared to GARs and PSRs (75.0% compared to 39.5% and 35.2% respectively). Multivariate analysis showed that the mean PSS was significantly higher among BVORs when compared with GARs (Adj β = 4.8; 95% CI 0.4, 9.2). No significant difference in PSS levels was reported when PSRs were compared to GARs. Increased PSS scores were found to be associated with worse family functioning (Adj β = 4.2; 95% CI 1.0, 7.4), while decreased PSS scores were associated with increased age (Adj β = -0.4; 95% CI -0.6, -0.1).
Conclusion: A better understanding of the various underlying factors associated with elevated stress is essential for improving the quality of life for SRs in Canada. Results of the study may help tailor more effective preventative measures or government interventions dedicated to reducing stress levels among this population.

1. Background

As of 2018, Syrians accounted for more than 6.7 million refugees globally, granting them the title of the largest displaced refugee population (UNHCR). Syrians have also been the predominant group of admitted and integrated refugees into Canada between the years of 2011 and 2016 (Houle, 2019), which is strongly attributed to the inception of the *Syrian Refugee Resettlement Initiative* in 2015 (Syrian Refugee Resettlement Initiative 2019). Consequently, Canada has become one of the global leaders for the resettlement of Syrian Refugees (SRs), welcoming a total of 44,620 individuals between the years of 2015 and 2020 (#WelcomeRefugees 2021), with the priority placed on young parents with children (Houle, 2019; K. Hadfield et al., 2017). Through this initiative, Canada aims to uphold its international commitment to global humanitarianism by supporting these families in their process of resettlement and enhancing their quality of life (UNHCR).

Canada provides support to resettled refugees through three different programs: Government-Assisted Refugees (GAR), Privately Sponsored Refugees (PSR) and Blended Visa Office-Referred refugees (BVOR) (OCASI). GARs receive settlement support from a federally funded Service Provider Organization (SPOs) (OCASI) () and financial support from the government for up to 1 year (OCASI). Canadian private sponsorship began in 1979 with the major resettlement of Indochinese refugees (Hynie, 2018a; Somerset, 1982; Hyndman et al., 2016) due to the instability of their countries of origin (Somerset, 1982) and was later reinforced by the influx of SRs (J. Hyndman et al., 2016). PSRs rely on their sponsoring organization, group or community for settlement and financial support during their first year in Canada (OCASI). In the third program, BVOR, financial support is divided between government and private sponsors (OCASI). As of October 2020, 44,625 Syrian refugees have been admitted into Canada with the bulk of Syrian refugees having arrived through the GAR (21,745) and PSR (18,93) routes and a small number (3945) arrived via BVOR (#WelcomeRefugees 2021).

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Despite the variety of settlement services offered by all sponsorship programs, adversity is still a contemporaneous issue among new and formerly integrated SRs and may provoke mental health issues and a great deal of stress (D. Silove et al., 2017; L.J. Kirmayer et al., 2011). Stress is a normal biological response to situational demand; however, it could be fatal if chronic (Z. CAMH 2020). Particularly, various physical and psychological conditions which include hypertension, myocardial infarction, anxiety and depression, can result from chronic stress (Z. CAMH 2020). Pre-migratory stressors for SRs, most commonly attributed to traumatic experiences, such as torture and war (D. Silove et al., 2017; Z. Steel et al., 2009), have historically been the main focus of academic literature (A. Malm et al., 2020). However, overemphasizing pre-migratory stressors may lead to the stigmatization and decreased sense of competence for SRs (A. Malm et al., 2020; M. Hynie, 2018). In contrast, placing a greater emphasis on post-migratory (i.e. post-resettlement) stressors may help improve SRs' mental health and well-being (M. Porter and Haslam, 2015; S.S.Y. Li et al., 2016), making their consideration more essential in optimizing the integration process and quality of life.

In the literature, the most commonly outlined post-migratory stressors for SRs include; discrimination, poor language skills, poor social support, unemployment, and cultural incongruence with the host country (D. Silove et al., 2017; A. Malm et al., 2020; P. Tinghög et al., 2017; U. Ghumman et al., 2016). Though these stressors are still applicable for SR parents, additional factors specific to them include; misalignment of traditional parenting practices with those of western host countries, family conflicts and dysfunction, and failure to uphold parental responsibilities due to new living and employment conditions (K. Hadfield et al., 2017; A. Malm et al., 2020; P. Tinghög et al., 2017).

The different sponsorship programs have a critical role to play in the settlement of refugees, as they are responsible to provide settlement services such as, employment, education, and language skills. Previous studies have consistently reported GARs to be the most vulnerable group of refugees when compared to PSRs (Evaluation of the Resettlement Programs(GAR and RAP) Evaluation, 2016; Hynie, 2019; Oda et al., 2019). A recent cross-sectional analysis of 386 SRs (177 GARs and 209 PSRs) from the Greater Toronto Area revealed that GARs were more likely to report higher needs, more complex medical conditions, lower perceived physical and mental health, higher unmet healthcare needs and more difficulty re-settling as compared to PSRs (A. Oda et al., 2019). Similarly, the Government of Canada's evaluation of the refugee resettlement system (2010–2015) also identified higher needs for the specialized health services including mental health services among GARs compared to PSRs (Evaluation of the Resettlement ProgramsGAR et al., 2016). However, there is still lack of clarity around the effectiveness of the various sponsorship programs with respect to mental health outcomes, particularly perceived stress. This study aims to assess the relationship between the different sponsorship programs and perceived stress among SR parents who resettled in the Greater Toronto area after 2015.

1.1. Theoretical Framework

Research has shown that refugees are at an increased risk of psychological disorders, when compared to the general population of the host country, with a consistent predictor being attributed to pre and post migration stressors (S.S.Y. Li et al., 2016; M. Fazel et al., 2005). However, studies have shown that successful integration depends on good mental health and well-being (Schick et al., 2021; Kogan and Shen, 2018). The theoretical framework for this study is based on the Holistic Integration Model (HIM), which builds on Ager and Strang's model of integration (Hynie et al., 2016; Ager and Strang, 2008). The HIM highlights a dynamic range of subjective factors (e.g., refugees' sense of belonging, safety and security), interactional factors (e.g., language adaptation and social and cultural norms/expectations), and social factors (e.g., social connections and institutional adaptation) that also influence integration. Moreover, the model specifies that integration through these factors is

moderated by individual characteristics (e.g., gender, age, time spent in refugee camps, education, and socioeconomic status). The focus of the present study is on institutional adaptation (measured through sponsorship programs), which is one of the social factors of the HIM that intends to measure the provision of settlement services that recognize and adapt to the unique needs of the refugees (Hynie, 2018).

2. Material and methods

2.1. Participants

The target population for this study consisted of SR parents living in the Greater Toronto Area in Canada. The inclusion criteria required participants to be SR parents over the age of 16 years, resettled in Canada after 2015, and with at least one child under the age of four at the time of interview.

2.2. Data collection

The participants were recruited by convenience sampling with the help of organizations including Access Alliance Multicultural Health and The Arab Community centre of Toronto. Starting May of 2019 until September 2019, the survey administration was carried out by six research assistants who are capable of reading, writing and speaking in Arabic, specifically in the Syrian dialect. Survey administration took place in different locations including public spaces, community centers, libraries, coffee shops or in the family's homes and the data was collected on Tablets. Additionally, two interviews were conducted over the phone as the participants were unable to meet in person. Once the interviews were completed, each participant received a $25 honorarium as well as a list of information about local services.

2.3. Measures

The main outcome, perceived stress, was assessed using the Perceived Stress Score (PSS), a reliable and valid psychological instrument used to measure the perception of stress (S. Cohen et al., 1983; E.H. Lee, 2012) with the Arabic version showing good psychometric properties (Almadi et al., 2012). Built on transactional model of stress, the development of PSS was based on one's perceived nonspecific stress in a given situation or a daily life situation (Lazarus and Folkman, 1984). The scale consists of 10 questions which assess how unpredictable, uncontrollable and overloaded the participants felt about their life situations during the last month (S. Cohen et al., 1983). Individual scores for the PSS range from 0 to 40, where a higher score represents an increased amount of perceived stress (S. Cohen et al., 1983). Furthermore, moderate perceived stress is defined as a PSS score ranging between 14 and 26 and high perceived stress defined by a PSS between 27 and 40 (N. Maswadi et al., 2019).

The main independent variable was the sponsorship program (GAR, PSR and BVOR) and several demographic, economic and social factors were considered as covariates. These factors included parent (mother or father), age, number of children, number of years resided in Canada, level of education (none or elementary, secondary high school and above high school), working status, English speaking abilities (measured on a Likert scale of 6 categories ranging from "not at all" to "excellent"), having at least one friend in Toronto with whom participants feel comfortable talking about personal matters (yes/no), having at least one relative (other than children and spouse) currently living in Toronto (yes/no), spending time in a refugee camp outside Syria before resettlement in Canada (yes/no), and perceived overall health (measured on a Likert scale of 5 categories ranging from "poor" to "excellent"). In addition, Family Functioning was measured using a valid and reliable 12-item questionnaire taken from the McMaster Family Assessment Device called "General Functioning," where an increase in the score represents poor family functioning (Epstein et al., 1983).

Table 1.
Characteristics of study participants in relation to types of sponsorship program.

	Total	Types of Sponsorship program			p-value
		GARs	PSRs	BVOR	
		N (%)			
Total	153 (100)	79 (51.6)	62 (40.5)	12 (7.8)	
Parent	—	—	—	—	—
Mother	80 (52.3)	43 (54.4)	31 (50.0)	6 (50.5)	0.860
Father	73 (47.7)	36 (45.6)	31 (50.0)	6 (50.5)	
Level of education	—	—	—	—	—
None or Elementary	46 (30.3)	25 (31.6)	18 (29.0)	3 (27.3)	0.465
Secondary or High	76 (50.0)	43 (54.4)	28 (45.2)	5 (45.5)	
school	30 (19.7)	11 (13.9)	16 (25.8)	3 (27.3)	
Above High school					
Currently working	—	—	—	—	—
Yes	42 (27.6)	22 (28.2)	19 (30.6)	1 (8.3)	0.282
No	110 (72.4)	56 (71.8	43 (69.4	11 (91.7)	
Refugee camp	—	—	—	—	—
Yes	22 (14.7)	11 (13.9)	11 (18.6)	0 (0.0)	0.241
No	128 (85.3)	68 (86.1)	48 (81.4)	12 (100.0)	
Relatives	—	—	—	—	—
Yes	80 (53.0)	41 (52.6)	33 (54.1)	6 (50.0)	0.961
No	71 (47.0)	37 (47.4)	28 (45.9)	6 (50.0)	
Friends	—	—	—	—	—
Yes	37 (75.87)	62 (78.5)	44 (72.1)	9 (75.0)	0.685
No	115 (24.3)	17 (21.5)	17 (27.9)	3 (25.0)	
	—	Mean (SD)	—		
Perceived Stress Score	12.5 (7.2)	12.0 (7.4)	12.1 (7.0)	16.8 (5.8)	0.099
English abilities	3.9 (1.1)	3.9 (1.14)	3.9 (1.1)	4.0 (0.7)	0.960
Age	35.0 (6.5)	34.1 (6.3)	36.0 (6.5)	35.5 (7.6)	0.181
Number of children	3.9 (1.1)	4.2 (1.9)	3.4 (1.7)	4.2 (2.1)	0.043[#]
Years in Canada	3.7 (1.0)	3.9 (0.8)	3.3 (1.2)	4.0 (0.7)	0.002[#$]
Family Functioning	1.5 (0.4)	1.6 (0.4)	1.5 (0.4)	1.5 (0.5)	0.963
Perceived overall health	3.0 (1.3)	3.0 (1.3)	3.0 (1.4)	2.7 (1.2)	0.770

\# significance between GARs and PSRs.

$ significance between BVORs and PSRs.

2.4. Analysis

Bivariate analysis was performed to assess the relationship between each of the demographic, economic and social factors and the sponsorship program. Simple and multiple linear regression analyzes were performed to assess the bivariate and the multivariate relationship between each of the variables and PSS. Unadjusted and adjusted beta coefficient (β) and 95% confidence interval (95% CI) were reported. All regression models adjusted for the clustering effect of belonging to the same family. All analyzes were conducted using the Statistical Package for the Social Science (SPSS, version 26.0). The project was approved by the Research Ethics Board at York University.

3. Results

A total of 155 participants were recruited for the present study and 2 were excluded as they were not sure about the type of their sponsorship program. Table 1 presents the descriptive statistics of characteristics of the 153 participants. Among the participants, 52% were sponsored via GAR, 40% via PSR, and approximately 8% via BVOR program. Among PSRs, 44% were funded by religious organization, 39% by group of private individuals, 10% by community organizations and 7% others including family members. Overall, 52% of the study participants were mothers and 48% were fathers and the average age of participants was 35 years ± 6.7. The highest level of education for 30% of the participants was none or elementary and 27% reported working at the time of the interview. Spending time in a refugee camp before resettlement in Canada was experienced by 14% of SR parents. In terms of social connections, the results showed that SRs parents reported more having at least one friend as compared to at least one relative (75% vs. 53%) in Toronto. Number of children and time spent in Canada were

the only variables significantly associated with the different sponsorship programs. The average number of children of refugees sponsored through the GAR and BVOR were significantly higher to those sponsored by PSR program (4.2 ± 1.9, 4.2 ± 2.1, and 3.4 ± 1.7 respectively; $p = 0.043$). In addition, the mean time spent in Canada was found to be lowest among PSRs (3.3 years ± 1.2) which was significantly different from GARs (3.9 years ± 0.8) and BVORs (4.0 ± 0.7), $p = 0.002$.

The mean PSS score reported for the participants was 12.5 ± 7.2 (range of 0 to 34) with highest mean being reported among BVORs (16.8 ± 5.8) when compared to GARs (12.0 ± 7.4) and PSRs (12.1 ± 7.2) ($p = 0.099$) (Table 1). Overall, 56.3%, 40.8%, and 2.8% of the participants presented low, moderate and high stress respectively with BVORs presenting the highest level of moderate stress when compared to GARs and PSRs (75.0% compared to 39.5% and 35.2% respectively) as shown in Fig. 1.

Table 2 reports the bivariate and multivariate association between the type of sponsorship program and other variables with PSS. On average, BVORs had a significant higher PSS score by 4.8 units when compared to GARs (Adj $\beta = 4.8$; 95% CI 0.4, 9.2), while the PSS scores for PSRs were not significantly different from those of GARs (Adj $\beta = 1.2$; 95% CI −1.6, 4.0). Age was significantly associated with a reduction in PSS scores, where an increase in age by one year resulted in the PSS score decreasing by 0.4, therefore indicating reduced stress (Adj $\beta = -0.4$; 95% CI −0.6, −0.1). As family functioning values increased by one unit (higher family functioning values represent worse family functioning), PSS increased by 4.2, therefore implying that worse family functioning results in more stress (Adj $\beta = 4.2$; 95% CI 1.0, 7.4). However, no significant association was found between PSS score and any of the other covariates. The adjusted model in this study was able to explain 27% of the variance in PSS ($R^2 = 0.27$).
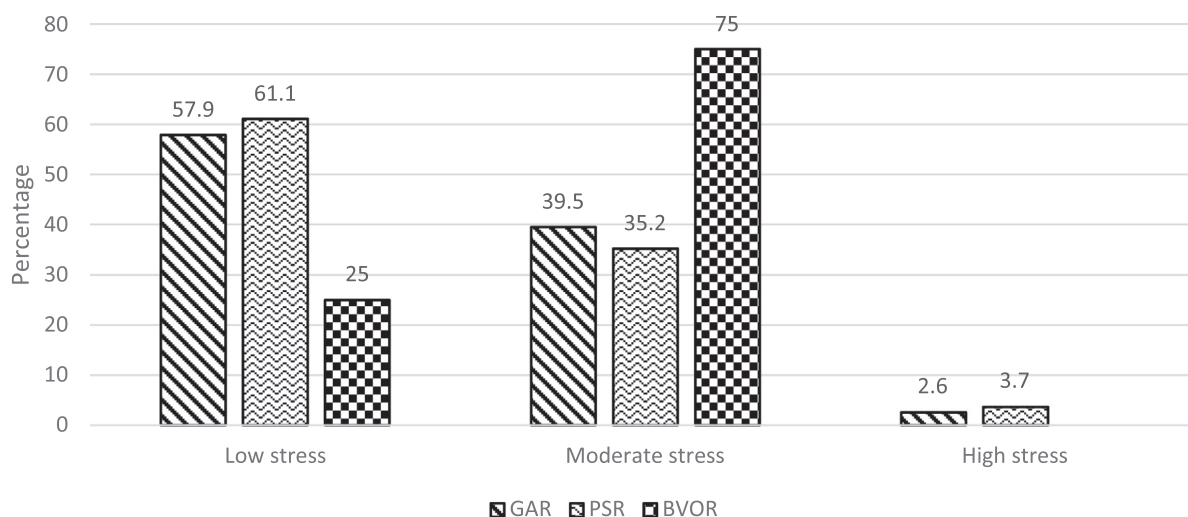
Fig. 1.. Proportion of PSS levels among sponsorship programs.

Table 2.
Bivariate and multivariate associations between types of sponsorship programs and perceived stress score.

	Unadjusted Beta (95%CI)	P value	Adjusted Beta (95%CI)	P value
Refugee sponsorship				
GARs	Ref		Ref	
PSRs	0.4 (−2.2, 2.9)	0.788	1.2 (−1.6, 4.0)	0.390
BVOR	4.6 (0.2, 9.0)	0.04	4.8 (0.4, 9.2)	0.033
Parent	—	—	—	—
Mother	Ref		Ref	
Father	−2.6 (−5.0, −0.3)	0.03	0.3 (−3.4, 4.0)	0.880
Level of education	—	—	—	—
None or Elementary	Ref		Ref	
Secondary or High	−0.6 (−3.4, 2.2)	0.660	2.1 (−1.2, 5.3)	0.205
school	0.1 (−3.3, 3.6)	0.935	5.2 (0.8, 9.6)	0.200
Above High school				
Currently working	—	—	—	—
Yes	−3.0 (−5.7,0.3)	0.027	−1.6 (−5.3, 2.0)	0.370
No	Ref		Ref	
Refugee camp	—	—	—	—
Yes	1.7 (−1.6, 5.1)	0.086	1.5 (−1.9, 4.9)	0.372
No	Ref		Ref	
Relatives	—	—	—	—
Yes	−1.6 (−4.0, 0.8)	0.183	−1.0 (−3.6, 1.5)	0.415
No	Ref		Ref	
Friends	—	—	—	—
Yes	−2.4 (−5.3, 0.4)	0.093	−0.9 (−3.9, 2.1)	0.540
No	Ref		Ref	
English abilities	−0.4 (−1.5, 0.7)	0.501	−0.5 (−1.8, 0.8)	0.437
Age	−0.3 (−0.4, −0.1)	0.006	−0.4 (−0.6, −0.1)	0.009
Number of children	0.2 (−0.5, 0.8)	0.581	0.6 (−0.3, 1.4)	0.199
Years in Canada	0.1 (−1.2, 1.3)	0.916	0.5 (−0.9, 1.8)	0.497
Family Functioning	5.8 (2.9, 8.6)	<0.005	4.2 (1.0, 7.4)	0.011
Perceived overall health	1.2 (0.3, 2.1)	0.008	1.3 (0.2, 2.3)	0.236

4. Discussion

The present study assessed the relationship between different sponsorship programs and perceived stress among SR parents who resettled in the Greater Toronto area after 2015. Mean PSS varied significantly across the different sponsorship programs with the highest score being among BVOR when compared with GARs. Increased PSS scores were found to be significantly associated with worse family functioning while decreased PSS scores were associated with increased age. Understanding the relationship between different sponsorship programs and perceived stress among SR families in Canada is key for improving the overall wellbeing and quality of life for this population. The findings of this study are valuable as they can help guide preventative measures or governmental interventions aimed at mitigating stress levels among SRs in

hopes of improving their overall wellbeing and thus lead to a successful integration in the host country.

The overall mean PSS score for the sample was $12.5 \pm \pm 7.2$ which is significantly lower than that reported in other studies. For instance, a study conducted by Sankar et al. (R. Sankar et al., 2019) on 80 SR household families living in Florida, USA, reported a mean PSS score of 20.9 ± 9.0, with refugees residing in urban areas having significantly higher scores than those residing in rural areas (24.6 ± 6.1 compared to 17.8 ± 9.1 respectively) (R. Sankar et al., 2019). Another study conducted by Alhalaiqa et al. (F. Alhalaiqa et al., 2020) reported a mean PSS of 23.4 ± 6.4 for SR university students residing in Jordan. The disparity in the perceived stress levels reported among SRs in different studies may potentially reflect the differences in resettlement policies, provision of refugee services and conditions of the host countries (K. Had-

field et al., 2017). In Canada, refugees from all categories are offered reception, orientation, and assistance with housing, language training, education, employment, referrals to essential federal/provincial programs and settlement programs, and financial assistance. In addition, all refugees residing in Canada are entitled to free, basic medical and prescription services under the Interim Federal Health Program until they become eligible for provincial or territorial services (K. Hadfield et al., 2017).

The present study showed that the program of sponsorship, a measure of institutional adaptation which is listed as one of the social factors of the HIM (M. Hynie et al., 2019), was a significant predictor of perceived stress after adjusting for several demographic, economic and social factors. Multivariate analysis showed that PSS scores on average increased by 4.8 units for BVORs compared to GARs. This relationship, to our knowledge, has not been previously noted. The reasoning behind the poor stress outcome for BVORs is not fully understood and difficult to explain. The BVOR program is significantly newer and smaller than GAR and PSR, and therefore lacks the same amount of research when compared to the other programs (J. Hyndman et al., 2016). The BVOR program was introduced in 2013 and sits between Canada's two traditional resettlement programs (i.e. GAR and PSR). GARs receive government support for their first year in Canada. With private sponsorship, groups of individual Canadians take on the financial and emotional support of resettled refugees for the 1-year period (K. Hadfield et al., 2017). However, BVORs receive six months of financial support from the government of Canada and six months from private sponsors (K. Hadfield et al., 2017). Although this blended model helps to bring in many refugees at a reduced financial cost to government and facilitates greater integration of refugees into Canadian society, a lack of clarity persists in relation to the guidance and procedures for the BVOR program (Evaluation of the Resettlement ProgramsGAR et al., 2016). This could lead to inconsistencies in how BVOR refugees are resettled and receive support services and eventually could be a reason for increased perceived stress among BVORs.

Previous literature has reported PSRs to be better at pursuing economic and integration activities when compared to GARs (M. Hynie et al., 2019; Evaluation of the Resettlement ProgramsGAR et al., 2016). Findings of a longitudinal study on Syrian refugee integration in Canada comparing 1921 adult SRs (GARs vs. PSRs) in three provinces (British Columbia, Ontario, Quebec) revealed that PSRs had broader social networks including more friends and relatives in Canada, more likely to be employed and had a family doctor compared to GARs (M. Hynie et al., 2019). In addition, PSRs tend to have stronger English- or French-language skills and higher levels of education compared to GARs indicating that PSRs better pursue economic and integration activities, resulting in stronger employment outcomes compared to GARs (Evaluation of the Resettlement ProgramsGAR et al., 2016). However, the findings of the current study did not demonstrate such differences in socioeconomic factors between GARs and PSRs. The reason for this is not clear but a possible explanation for the inconsistent results may be that this study sample was comprised of SR parents with children. In Canada, families are eligible for federal and provincial child benefits, thus emphasizing the impact of HIM where obligation to integrate and adjust does not fall on just refugees/immigrants but also on the dominant host society (M. Hynie et al., 2019; A. Oda et al., 2019). This child benefit is a tax-free monthly payment to help with the cost of raising children under 18 years of age (Brown and Tarasuk, 2019). Higher average number of children among GARs compared to PSRs in our study sample may indicate more financial support to GARs from the government when compared to PSRs. Another possible explanation for this discrepancy maybe that our study sample was restricted only to SR parents living in the Greater Toronto Area while previous studies recruited participants from multiple Canadian provinces (M. Hynie et al., 2019; Evaluation of the Resettlement ProgramsGAR et al., 2016).

This research also showed that parental age was significantly and inversely related to perceived stress levels among SRs parents. However,

this phenomenon has not been studied in previous literature for refugee populations, creating opportunities for future research. Nonetheless, the finding of this study is in agreement with those conducted on general populations that also examined a negative link between increasing age and perceived stress levels (S.B. Scott et al., 2014; N.M. Monteiro et al., 2014). Such a relation may be attributed to the tendency of older adults adopting greater coping strategies (such as problem-solving and avoidance) gained through various life experiences to combat stress, as well as having more favourable living environments and conditions (S.B. Scott et al., 2014; N.M. Monteiro et al., 2014; T.J. D'Zurilla et al., 1998; Y. Chen et al., 2018). In addition, worsened family functioning was shown to be associated with higher levels of stress. Previous studies have also observed this relation, where poor family functioning after resettlement, often stemming from conflicts between spouses and also with their children, contribute to a great deal of burden and mental health degradations for SR parents (A. Malm et al., 2020; N.G. Khawaja et al., 2017). This relation can be explained by behavioral and emotional changes in SR children, as a result of traumatic events, as well as by social stressors felt by the parents (A. El-khani et al., 2013). This has been found to lead parents to resort to physical disciplining tactics and thus, reduced familial communication and increased stress (A. El-khani et al., 2013).

A number of limitations must be taken into account. Although the BVOR sample size in this study was small, the results obtained are worth further investigation. Given that this is a cross-sectional study, one of the limitations involve direction of causality between PSS scores and the associated variables. The results are also subject to confounding biases such as participants' personalities, maturity levels and coping abilities. Moreover, as participation in this study was voluntary, there was also the potential for selection bias to have occurred. Recall bias is another possible limitation in this study as all the responses were self-reported. Lastly, generalizability of these results is limited since the participant pool was recruited using convenience sampling of SR parents residing in the Greater Toronto Area.

5. Conclusion

This study is the first to assess the relationship between different sponsorship programs and perceived stress among SR parents who resettled in Canada. Increased PSS scores were found to be significantly associated with BVOR program (in comparison to GAR) and worse family functioning, while decreased PSS scores were associated with increased age. These results are noteworthy as they may help tailor more effective preventative measures or government interventions dedicated to reducing stress levels of refugees thus resulting in more successful integration in Canada.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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