# Stressful Life Events, Psychological Symptoms, and Social Support of Children and Young Asylum-Seekers in Iceland

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#### Abstract

Background: Children and young asylum-seekers are often exposed to stressful life events (SLE) and risk developing psychological symptoms. However, risk and protective factors can positively and negatively influence this vulnerable group's mental health.

Aims: To examine the SLE experiences and psychological symptoms of children and youth who seek refuge in Iceland. And to study the role that gender, traveling (un)accompanied, and perceived social support play in the development of psychological symptoms for this population.

Methods: Participants were 75 children and youth ages 13 to 24 who sought asylum in Iceland (M = 19.7, SD =3.0, 66.7% male). Sociodemographic and social support data were collected via face-to-face interviews, with the help of interpreters when required; while SLE, post-traumatic stress, depression, anxiety, and behavioral symptoms measures were administered to participants.

Results: The results indicated that participants who traveled alone to Iceland had experienced more SLE than those who traveled accompanied. SLE experiences were associated with PTSD and other psychological symptoms. Results also revealed that SLE and perceived peer support played a significant role in predicting PTSD symptoms.

Conclusions: Children and young asylum-seekers are exposed to a high number of SLE, which increases their risk of developing psychological problems. This potential risk underlines the need for early assessments and intervention. Moreover, higher levels of social support were related to less severe PTSD symptoms, suggesting that social resources act as protective factors for these children and youth in helping them cope with SLE. Keywords: Youth, Social Support, Asylum-seekers, stressful life events, PTSD, psychological symptoms.

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#### Background

The current Russia-Ukraine war, Venezuela's humanitarian crises, and the conflicts in Afghanistan, South Sudan, Syria, and Yemen, to name a few, have created a global refugee crisis of unprecedented scale. In 2020, among the 82.4 million people who were forcibly displaced, an estimated 35 million (42%) were children living as internally displaced, refugees, or asylum-seekers across the globe [1]. During the first four months of 2022, Iceland received 1332 asylum applications, of which 27% were from minors mainly traveling accompanied. In comparison, 181 people sought refuge in Iceland during the first four months of 2018 [2]. According to studies conducted in European countries, children and youth forced to flee are often exposed to potentially traumatic experiences, and many develop psychological problems [3, 4, 5]. However, research on this topic is sorely lacking in Iceland, and there are gaps in the literature regarding the role that risk and protective factors play in exposure to SLE and psychological symptoms development for this vulnerable population [4].

Children and youth asylum-seekers often report having experienced stressful life events (SLE) before arrival in the receiving country, particularly those who travel unaccompanied [4, 5]. The most prevalent SLE experiences being life-threatening events, physical abuse, death of a close relative, witnessing violence, and war [5, 6]. In the current study, the term asylum-seeker is defined as a migrant who claims to have been forcibly displaced and applies for refugee status in a receiving country (e.g., Iceland). The role gender plays in the vulnerability to exposure to traumatic events is unclear. Recent studies have indicated that male children and young migrants on the move are generally more at risk of abuse and exploitation and experience significantly more traumatic events than females [7]. Conversely, others have suggested that female refugees are at greater risk of experiencing gender-related traumatic experiences, such as sexual violence [8], increasing their risk of developing PTSD [9].

SLE and conflict are related to mental health problems in adolescents and young adults in general [10]. Traumatic experiences can lead to the development of PTSD and other mental health illnesses. Unaccompanied asylum-seeking children belong to the most vulnerable group of children who seek refuge and report symptoms of PTSD and other psychological symptoms (i.e., anxiety, depression, and behavioral problems) [11, 12]. However, both unaccompanied and accompanied refugee children and youth are at risk of developing mental health problems [4, 11]. Accompanied refugee children living with a parent diagnosed with PTSD are potentially vulnerable to the intergenerational transmission of psychiatric disorders [13]. Furthermore, being from a foreign background might also increase the vulnerability to developing mental health issues. Research has shown that in Europe, non-European migrant children and adolescents present more emotional and behavioral problems than native European children [14]

Although adverse experiences might affect the mental health of children and young refugees, they can also experience positive well-being following traumatic experiences [15]. Social support is an essential factor for young people's mental health [16]. For refugee minors, social support and family security are related to reduced rates of PTSD and depression [17]. Inversely, factors such as low social support and the marginalization acculturation strategy (i.e., rejecting the heritage culture and avoiding interaction with the mainstream society) can lead to poor psychological well-being [18, 19]. Moreover, for unaccompanied refugee minors, lower peer social support increases the association between SLE and anxiety symptoms [20].

Mental health problems have been found amongst migrant youth in Iceland [21], although research on mental health issues concerning children and youth who seek asylum in Iceland is absent. Nonetheless, a qualitative study reported that accompanied asylum-seeking children and youth in Iceland experienced invisibility during the asylum process and were not encouraged to express their opinions on matters of importance to them, such as their mental health and adaptation in Iceland [22].

#### **Aims and Hypotheses**

Against this background, this study sought to address questions that overcome some of the gaps in the literature. Firstly, there is conflicting evidence regarding the relationship between gender and exposure to SLE for children and young asylum-seekers. Some research suggests a higher risk of SLE for males, while others for females. Secondly, there is disagreement concerning the risk of exposure to SLE and psychological symptoms' development for children and young asylum-seekers traveling alone compared to those traveling accompanied, with some evidence suggesting that unaccompanied children and youth are more at risk. Lastly, this study looked at the role factors such as SLE, perceived parental support, and perceived peer support play on the psychological symptoms' development of children and young asylum-seekers in Iceland. Hence, the following hypotheses were put forward:

Hypothesis 1: The participants will, on average, have a high prevalence of SLE, with those who traveled alone to Iceland reporting a higher prevalence of SLE than those who traveled accompanied. Furthermore, gender differences will be tested regarding the prevalence of SLE.

Hypothesis 2: The participants will, on average, have high levels of PTSD symptoms and other psychological symptoms (i.e., anxiety, depression, and externalizing symptoms), with those who traveled alone to Iceland reporting significantly higher levels of PTSD and psychological symptoms than those who traveled accompanied. Hypothesis 3: A higher number of SLE will be significantly and positively related to higher levels of PTSD and other psychological symptoms.

Hypothesis 4: Less perceived parental support and less perceived peer support will be significantly and negatively related to higher levels of PTSD and other psychological symptoms.

#### Method

## **Participants**

Participants were seventy-five children and youth ages 13 to 24 (M =19.7, SD = 3.0), 50 males and 25 females. Thirty-eight participants traveled to Iceland accompanied by a family member or legal guardian (50.7%), while 37 traveled alone (49.3%). Participants came from 25 different countries: 37 from the Middle East and North Africa, 17 from Sub-Saharan Africa, 14 from Latin America, five from Eastern Europe, one from South Asia, and one was undocumented at birth.

The mean number of months participants lived in Iceland was 23.5 (SD = 14.5). Most participants lived in the capital area when the assessment interview took place.

## Procedures

The Directorate of Immigration (DI) provided the researchers with 288 names and phone numbers of children (and their legal guardians) and youth who sought asylum in Iceland between 2016 and 2020. Subsequently, invitation letters were sent to potential participants, written in five languages (i.e., English, Spanish, Farsi, Kurdish, and Arabic), and only 20 refused participation. Social workers and the primary researcher contacted potential participants by phone, in random order, to answer questions and set up appointments. However, some potential participants were unreachable (e.g., phone numbers were missing or disconnected). Eventually, 75 were included in this study. Recruitment and interviews, along with assessment, were carried out between July 2020 and March 2021.

Participants and legal guardians signed a written informed consent form before the assessment interview took place and could refrain from answering questions or terminate participation during the duration of the study. Participation was anonymous, and no incentives were given for taking part in the study. Participants could elect where the data collection took place; most chose a private mental health clinic, while the rest preferred to meet at their homes or public locations. Data on sociodemographic information and perceived peer and parental social support (i.e., Perceived Parental Support Scale and peer version) were collected via face-to-face interviews, with the help of interpreters when required; while SLE and mental health measures (i.e., Stressful Life Events Checklist, the Reactions of Adolescents to Traumatic Stress (RATS) self-report, and the Hopkins Symptom Checklist-37 for Adolescents) were administered to participants following the face-to-face interviews.

The first author of this study, a clinical psychologist, conducted the assessment interviews and provided immediate psychological support when required. Participants were offered a free session with an impartial mental health professional following the interview, but no one requested this service. Most assessment interviews were performed in English, 32% with the help of an interpreter, 22.6% in Spanish, and 2.7% in Icelandic. Interviews were not audio-recorded as it was expected that fewer people would participate if they knew they were being recorded.

The study received ethical approval from the Icelandic National Bioethics Committee and the Data Protection Authority in May 2020 (VSN-20-005).

#### Measures

#### Socio-demographic Data

Demographic data were collected from assessment interviews with participants, such as age, gender, country of origin, date of arrival in Iceland, and whom they traveled with to Iceland. Asylum data regarding application date and status were collected from the DI's database.

#### Stressful Life Events

The Stressful Life Events (SLE) checklist measures whether an adolescent meets diagnostic criteria A1 (i.e., experiencing a traumatic event) for a diagnosis of PTSD according to the DSM-IV [23]. It consists of 13 "yes" or "no" items regarding potential traumatic events related to loss, conflict, and violence. Scores on the SLE checklist range from zero to 13, and higher scores represent a greater number of SLE.

## Post-traumatic Stress Disorder

The Reactions of Adolescents to Traumatic Stress (RATS) self-report measures symptoms of post-traumatic stress disorder according to DSM-IV. It consists of 22 items on a 4-point Likert scale, ranging from one (*not*) to four (*very much*). Higher scores indicate more PTSD symptoms; scores range from 22 to 88. The suggested cut-off total score for caseness is 50 (60<sup>th</sup> percentile) [23]. The RATS is a reliable and valid instrument for assessing posttraumatic stress reactions of culturally diverse adolescents [24]. The Cronbach's alpha value obtained in this study was  $\alpha$ =.86.

### **Psychological Symptoms**

The Hopkins Symptom Checklist-37 for Adolescents (HSCL-37A) measures anxiety, depression, and externalizing (behavior) symptoms. The HSCL-37A consists of 37 items on a 4-point Likert scale, ranging from one (*never*) to four (*always*.) Higher scores indicate greater difficulties; scores range from 37 to 148. The suggested HSCL-37A scale's cut-off score for caseness is 69 (60<sup>th</sup> percentile) [25]. The validity and reliability of the HSCL-37A have been

demonstrated with culturally diverse adolescent populations [26]. The Cronbach's alpha value obtained in this study was  $\alpha$ =.95.

In the current study, the item "loss of sexual interest" was considered inappropriate for younger adolescents and was omitted and scored as missing for nine participants.

#### Social Support

The Perceived Parental Support (PPS) scale measures adolescents' perception of parental support. The PPS was adapted to measure perceived peer support in the current study. The PPS asks responders to rate, on a 5-point Likert scale, how easy or difficult it is for them to receive the following from their parents (or peers): "caring and warmth, talks about personal affairs, advice about schoolwork/work, advise about other issues, and support with other things." Scores on the scale range from five to 20, and higher scores represent greater perceived support. Previous research has demonstrated the construct validity and reliability of the scale [27]. The scale was validated using data from eight European cities; the Cronbach's alpha varied from  $\alpha$ =.77 to  $\alpha$ =.87. In the current study, combining the five items yielded a Cronbach's alpha of  $\alpha$ =.87 regarding parental support and  $\alpha$ =.84 regarding peer support. In this study, PPS parental and peer scale questions were asked to participants in an interview-like format.

Centrum '45 (https://www.centrum45.nl/) approved the use of all translations of the SLE, RATS, and HSCL-37A in the current study (Gerda Heslinga, personal communication, April 8, 2019).

#### Analyses

Data were analyzed using IBM SPSS statistics, version 27. Descriptive analyses were conducted to evaluate demographic characteristics. Pearson correlations and multiple regression analyses were conducted to test hypotheses. Assumptions for all data analysis were examined and met.

#### Results

The mean number of SLE experienced by participants was 6.44 (SD = 2.53). Those who traveled alone (N=37, M= 7.03, SD=2.37) experienced significantly more SLE than participants who traveled accompanied to Iceland (N=38, M= 5.87, SD=2.58) (t <sub>(73)</sub> = 2.02, p<0.05). There was not a significant difference between females (N = 25, M = 6.24, SD = 2.44) and males (N = 50, M = 6.54, SD = 2.60) in the prevalence of experienced SLE (t <sub>(73)</sub> = -.48, p = .63).

Table 1 provides an overview of PTSD and psychological symptoms and compares symptoms scores for children and youth asylum-seekers who traveled alone and accompanied to Iceland. Mean total scores for PTSD symptoms and psychological symptoms were in the average range. However, 53.3% of participants scored above the cut-off score for PTSD symptoms (measured by the RATS) and 38.7% for total psychological symptoms (measured by the HSCL-37A). As seen in Table 1, t-test results revealed no significant differences in levels of PTSD symptoms and psychological symptoms between participants who traveled alone to Iceland and those who traveled accompanied.

### Table 1

	Total $N = 75$		Accompanied N= 38,	Alone N=37	Mean comparisons	
	M (SD)	Above cut-off, <i>n</i> (%)	M (SD)	M (SD)	T-test score (df)	
PTSD	48.41 (11.20)	40 (53.3%)	48.21 (10.42)	48.61 (12.08)	t (73) = .16	
Psychological symptoms	65.66 (19.00)	29 (38.7%)	68.07 (18.08)	63.18 (19.83)	t (73) = -1.12	

PTSD and psychological symptoms' means, standard deviations, cut-off scores, and mean comparisons between participants who traveled alone or accompanied to Iceland

*Note.* PTSD symptoms scale (i.e., RATS), psychological symptoms scale (i.e., HSCL-37). \* p<0.05, \*\* p<0.01.

As seen in Table 2, the number of experienced SLE was found to be significantly and positively related to PTSD symptoms (r = .44, p<0.01) and psychological symptoms (r = .30, p<0.01).

Less perceived parental support (r = -.23, p<0.05) and less perceived peer support (r = -.33, p<0.01) were significantly and negatively related to higher levels of PTSD symptoms but not to other psychological symptoms (see Table 2). There was a high and significant correlation between PTSD symptoms and other psychological symptoms (r = .81, p<0.01).

#### Table 2

Variables	1	2	3	4	5
1. Parental support	-				
2. Peer support	.10	-			
3. SLE	34**	04	-		
4. RATS	23*	33**	.44**	-	
5. HSCL-37	13	16	.30**	.81**	-

Correlations between parental support, peer support, SLE, and psychological symptoms

*Note.* \*Significant at the 0.05 level (2-tailed). \*\*Significant at the 0.01 level (2-tailed).

A multiple regression analysis was used to explore the contribution that perceived parental support, perceived peer support, and the number of SLE made towards the prediction of PTSD scale scores (i.e., RATS). The analysis indicated the three predictors explained 30.0% of the variance ( $R^2 = 0.30$ ,  $F_{(3,71)} = 10.16$ , p<0.01), with perceived peer support ( $\beta = -$ 

.75, p<0.01) and the number of experienced SLE ( $\beta = 1.82$ , p<0.01) making significant contributions to the prediction. Perceived parental support did not make a significant independent contribution when controlling for perceived peer support and SLE ( $\beta = -.14$ , p = 0.56).

Likewise, a multiple regression analysis was conducted to explore the contribution that perceived parental support, perceived peer support, and the number of SLE made towards predicting psychological symptoms' scale scores (i.e., as measured by the HSCL-37A). The analysis indicated the three predictors explained 11.3% of the variance ( $R^2 = 0.11$ ,  $F_{(3,71)} = 3.01$ , p<0.05), with only SLE ( $\beta = 2.16$ , p<0.05) making a significant contribution to the prediction. Perceived parental support ( $\beta = -.058$ , p = 0.90) and perceived peer support ( $\beta$ = -.62, p = 0.19) did not make significant independent contributions to the prediction when controlling for the other two variables.

#### Discussion

The current findings confirm the first hypothesis and support the suggestion that children and youth asylum-seekers are exposed to a high number of stressful life events (SLE) [4, 5, 6]. Participants in the study experienced an average of 6.44 SLE (SD = 2.53, range 1-13); in comparison, Icelandic adolescents and youth have reported a lower mean number of experienced events (ranging from 4.18 to 4.78) from a list of 29 undesirable life events [28]. Moreover, similar to other studies, participants who traveled alone to Iceland reported significantly more SLE than those who traveled accompanied [4].

In the current study, gender differences regarding the prevalence of experienced SLE were not found. Research has suggested that female refugees are more exposed to genderrelated traumatic events (e.g., sexual abuse) than male refugees, increasing their risk of PTSD [8, 9]. These results might suggest that for children and youth asylum-seekers, it is not the number of traumatic events that matters but the type of SLE they have experienced. Future research should focus on SLE type and severity, not the number of events.

As stated in the second hypothesis, the results indicated high levels of psychological distress among children and youth asylum-seekers in Iceland (PTSD symptoms 53.3%, and other psychological symptoms 38.7%). These results are comparable to studies examining the prevalence of mental disorders in young refugees and asylum-seekers in European countries [3]. In comparison, the prevalence of mental disorders among young people in Europe is 15.5%, with anxiety disorders being the most common mental disorder (7.9%) [29]. In the current study, those who traveled alone to Iceland did not report significantly higher levels of PTSD symptoms and other psychological symptoms than those who traveled accompanied, as hypothesized. Arguably, this could be due to the small sample size. However, a similar study conducted in Germany also showed no significant differences between psychological scale scores of unaccompanied and accompanied refugee minors [4].

Study results confirmed the third hypothesis and were in line with previous studies showing that a higher number of SLE is significantly and positively related to higher levels of PTSD and other psychological symptoms [4]. Lastly, study findings confirm the fourth hypothesis and support the suggestion that low social support is related to an increased risk for PTSD, depression, and anxiety symptoms [16, 20]. Still, multiple regression analyses showed that perceived support from peers and SLE predicted PTSD symptoms, and only SLE predicted other psychological symptoms. These results suggest that peer support might help these children and youth cope with SLE experiences, mitigating the development of PTSD symptoms after a traumatic incident. Unlike other psychological symptoms, which might have been present before exposure to SLE.

The current study has some limitations. The current study is based on cross-sectional data, making it difficult to draw inferences about the temporal relations among the studied

variables. Moreover, the study sample had fewer females than males, making it harder to further analyze differences based on gender. The assessment of psychopathology relied solely on participants' self-reports, and other sources of information might have resulted in more reliable data. Because the study was carried out in various languages, interpretation bias can be a potential limitation. Additionally, since the study was conducted in Iceland with a group of individuals from diverse cultural backgrounds, caution should be taken when generalizing study results to other cultural settings. Lastly, future research should include other factors that might contribute to or hinder this group's mental health (e.g., acculturation strategy preferences).

However, the study has several strengths. Firstly, this is the first study in Iceland examining the SLE experienced by asylum-seeking children and youth and the role that risk and protective factors such as SLE and perceived parental and peer support play in the development of PTSD and other psychological symptoms. Furthermore, as both adolescent and asylum-seeking youth who traveled alone and unaccompanied to Iceland were included, direct comparisons between these two groups could be applied. Another strength of the study is that standardized measures commonly used among refugee minors in Europe were used, which allowed comparing the results with those reported in previous studies. Lastly, participants were assessed in an interview-like setting with interpreters, which resulted in very few missing data since difficulties in understanding could be resolved.

In conclusion, adolescent and young asylum-seekers are exposed to a high number of SLE, which increases their risk of developing mental health problems. Moreover, although those who traveled alone were more exposed to SLE, results revealed no significant differences between groups in the severity of PTSD and other psychological symptoms. In 2007, the Icelandic government enacted an integration policy on immigrant issues to ensure that all residents of Iceland, regardless of their age and background, enjoyed equal

opportunities to participate as active members of Icelandic society [30]. The policy emphasizes that for immigrants' integration to take place, Iceland's society needs to be able to react to changed circumstances in the labor market, school system, health care services, and other welfare services. Accordingly, the study results underline the need for health care and welfare services to adapt their services to the needs of vulnerable immigrant groups and provide early assessments and intervention for all children and young asylum-seekers, regardless of whether they travel (un)accompanied. Lastly, as higher levels of social support, particularly from peers, were related to less severe PTSD symptoms, government policy should focus on creating opportunities that foster social support for these children and youth to help them successfully cope with SLE.

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## **Declaration of Conflicting Interests**

The authors declare that there is no conflict of interest.

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