ORIGINAL ARTICLE

Trauma and Coping in Somali and Oromo Refugee Youth

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Purpose: **To describe war-related trauma history, immigration factors, problems, and coping of Somali and Oromo refugee youth.**

Methods: **Analysis of a subset of participants (N = 338) aged 18–25 years from a population-based survey of Somali and Oromo refugees conducted in 2000–2002. Data included trauma history, life situation, and scales for physical (Cronbach α = .69), psychological (α = .56), and social problems (α = .69). Data were analyzed using Chi-square and Mann-Whitney U tests.**

Results: **Average emigration age was 14.8 years, with 4.2 years in transit and 2.0 years in the United States; 60% reported plans to return home to live. Two-thirds (66%) had less than a high school education, 49% had English language problems, 49% were employed (38% female vs. 57% male); 70% were single, with Somali females more likely than Oromo to be partnered and mothers (39% vs. 19%). There were significant ethnicity/gender differences for all problem scales. More females reported feeling alone (24% vs. 61%, $p < .001$). Youth with symptoms of posttraumatic stress syndrome reported more traumatic events (mean number of events: 28 vs.16). Trauma history was strongly associated with physical, psychological, and social problems. Most frequent strategies to combat sadness were praying (55.3%), sleeping (39.9%), reading (32.3%), and talking to friends (27.8%).**

Conclusions: **Many young Somali and Oromo immigrants to the United States experience life problems associated with war trauma and torture, but many others are coping well. The findings suggest a need to develop age-appropriate strategies to promote the health of refugee youth to facilitate their successful adaptation to adult life in the United States. © *Society for Adolescent Medicine, 2004***

KEY WORDS:
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The United Nations High Commission for Refugees recognized over 22 million refugees and an additional 20–25 million internally displaced persons in the year 2000 [1]. A sizable but unknown percentage are adolescents and young adults. Minnesota has the largest population of Somali people in the United States and one of the largest Ethiopian populations, with Ethiopians of Oromo ethnicity the largest group [2].

Many refugees living in the United States have experienced war-related trauma and torture in their home countries [3,4]. Trauma survivors are prone to

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long-term psychological and psychosocial difficulties such as anxiety, including posttraumatic stress disorder (PTSD), depression, sleep disturbances, and other problems that negatively affect coping and quality of life [5–8]. These problems are of concern as they may interfere with adjustment years after immigration [9,10].

There have been few published research reports on the experience and needs of refugee adolescents and young adults. Available reports from a variety of countries suggest that war trauma is often associated with social and psychological problems in adolescent and young adult refugees [11–17], but there may be differences among groups and subgroups in both their experiences and in their responses to those experiences. With civil war and lack of formal government and security over the past decade, Somalis have often suffered traumatic experiences. Ongoing political repression of differing religious and ethnic groups in Ethiopia suggests that many Oromo refugees may also have experienced trauma and torture. The Oromo people emphasize that they have been oppressed since their territory was incorporated into the country of Ethiopia at the end of the 19th century. [18–20]. These differences in the nature and longevity of population trauma and suffering may affect the severity of problems postmigration and have important implications for the development of interventions.

Resilience researchers have observed that despite trauma, extreme hardships or deprivation, many children and adolescents recover from such life events [21,22]. In studies of adolescents and youth in the United States, this ability to withstand stress has been associated with the presence of both internal and external protective factors [23–25]. Among the many factors studied as predictors of resiliency are risk and protective factors such as traumatic life experiences, family cohesion, social support, and the presence of caring relationships in the family, at school, and in the community [26,27]. The purpose of these analyses was to determine associations among the experiences, current problems, and coping strategies of Somali and Oromo youth to better understand differences and similarities among demographic subgroups. Research questions focused on describing prevalence of trauma, torture and psychosocial problems, coping strategies, and delineating associated demographic and experiential factors.

Methods

This cross-sectional research was part of a five-year, three-phase epidemiological study in the Somali and Oromo refugee communities of the Minneapolis and St. Paul, Minnesota metropolitan area. The present analyses examined the first phase of survey results for Somali and Oromo participants 18 to 25 years of age (N = 338). Permission for the study was granted by the Human Subjects Committee of the Institutional Review Board, University of Minnesota and the HealthPartners Human Subjects Committee, St. Paul, Minnesota.

Sampling

Development of a reasonable sampling frame was one of the major challenges faced by the study team because both ethnic groups included a large proportion of "hidden" members. Many Somali and Oromo refugees were not included in official statistics at the time of data collection (July 1999 to September 2001) because they arrived after the 1990 Census and ethnicity was not included until the year 2000 Census. Also, secondary migrants (those arriving in this state from elsewhere in the United States rather than directly from abroad) often had no contacts with official agencies and were not registered in state or local databases. For these reasons, no complete sampling frame existed from which to obtain a random sample; therefore, a variety of nonprobability sampling strategies were employed in multiple venues over a 2-year period to obtain a broad community cross section and the widest possible coverage of the targeted population groups. These strategies included targeted sampling, linkage sampling, and snowball sampling. Given a best estimate of total population size from official and non-official sources, the sample may represent up to 80% of the Oromo population, whereas Somali participants most likely represented only about 8% of the population owing to the larger number of Somalis in the Twin Cities area. Using a stratified sampling procedure, recruitment for the parent survey (N = 1134) was carried out until the sample included approximately equal numbers of participants in each of four groups: Somali men, Somali women, Oromo men, and Oromo women (results reported elsewhere) [28]. The participation rate for the overall study was 97.1% of those invited. A total of 338 young people aged 18 to 25 years were included in the present analyses.

Data Collection Instrument

The investigator-designed data collection instrument (RPS-1) was translated and back translated with

extensive input from the two refugee groups. It consisted of 188 questions (585 response items), including biographical information, current life circumstances, life before coming to the United States, health questions, and experience of trauma/violence/deprivation. The pencil-and-paper surveys were completed by participants if they were literate in English, Somali, or Oromo languages, and administered orally for the nonliterate by highly trained interviewers of like gender and ethnicity. Among youth 18–25 years of age, 56.2% of surveys were self-administered and 43.8% were interviewer-administered.

Relevant item clusters were developed to measure social problems (15 items, Cronbach α for youth = .70), psychological problems (11 items, α = .56), and physical problems (13 items, α = .69). In addition, symptoms of post-traumatic stress were measured using the PTSD Checklist, Civilian Version (PCL-C), a 17-item rating scale (α = .92). PCL-C scores were, for the most part, analyzed as a continuous variable. To assess the factors associated with those youth that appeared to have the least evidence of PTSD symptoms, a dichotomous variable was created from those with PCL-C scores in the lowest quartile and the remainder of the sample. This cutpoint (PCL-C score of 22 or less) was selected because it separated those youth who had virtually no indication of psychological problems from the others who had some indication of problems. To measure and compare relative amounts of torture and other forms of trauma experienced by refugee youth, affirmative responses to specific questions in each area were analyzed as a count (trauma count: 57 response items, torture count: 61 response items).

Analysis was conducted using SPSS version 11 (SPSS, Chicago, IL.) and SAS version 8 (SAS Institute, Cary, N.C.). Frequencies and means were generated for variables of interest and scales to describe the sample and its characteristics. Chi-square statistics were used to assess differences among groups on categorical measures. Associations among interval or ordinal variables were analyzed using Pearson and Spearman correlations. For interval data, differences among groups were assessed using analysis of variance (ANOVA) with *a priori* contrasts for normally distributed data or Kruskall-Wallis ANOVA with *post hoc* Mann-Whitney tests for nonnormally distributed data. In the latter case, overall alpha level was controlled using a Bonferroni correction.

Results

Demographics

Most participants were male (61.2%), reflecting the gender distribution of the parent study and the overall difficulty in recruiting females in these two ethnic groups. Similarities and differences between Somalis and Oromos and between male and female participants are shown in Table 1. Marital status differed among the four groups ($p < .001$). Very few participants reported divorce (3.3%), but a sizable proportion (15.8%) reported separation from their spouse by immigration, primarily Somali women and Oromo men. Young women of both ethnicities were more likely to report living with their partner than were males. Marital status differed by gender ($p < .001$) but not by ethnic group ($p = .08$), with women more likely to live with their partners than were men. Relatively few Somali women were single.

Overall, nearly two-thirds (66.2%) of Somali and Oromo young people reported they had not graduated from high school although they were at an age (18 years or over) where most would have completed high school in the United States had they attended school without interruption. Few (7.3%) had any post–high school education. Oromo women were less than one-half as likely to have a high school education than the other groups (p-value comparing the four groups = .02). Somali women were most likely to have had no education (10.8%), although Somali men were least likely (3.6%). Young men reported higher rates of written and oral English fluency compared with women (p-values $< .001$). About one-half of young people (49.1%) reported having problems learning English, including three out of four Oromo women. Comparisons of the four gender/ethnic groups for all of the above demographic variables were statistically significantly different (Table 1).

Immigration Factors

On average, these young people were middle adolescents when they left their home countries (median age: 15.0 years), although some were as young as three years. The young people in this sample experienced several years in transit before entering the United States (mean: 4.2 years) and, at the time of the survey, had been in the United States an average of only two years (Table 1). Oromo young people were more likely to have come to the United States with their family members compared with Somali youth

Table 1. Demographic Characteristics, Current Living Situation and Refugee History of Somali and Oromo Youth (aged 18–25 Years)

Characteristics	Somali Male n = 85 (25.1%)	Somali Female n = 65 (19.2%)	Oromo Male n = 122 (36.1%)	Oromo Female n = 66 (19.5%)	Total (N = 338)	*p*-Value Male vs. Female	*p*-Value Somali vs. Oromo	Overall *p*-Value
Demographics/education								
Mean current age (SD) (yrs)	21.3 (2.2)	21.5 (2.2)	20.6 (2.0)	20.6 (1.8)	20.9(2.1)	.64	<.001	.003
Marital status (%)						<.001	.08	<.001
Single	84.1	48.4	69.5	74.2	70.0			
Living with partner	2.4	21.9	5.9	19.7	10.9			
Separated by immigration	8.5	21.9	24.6	3.0	15.8			
Divorced/separated	4.9	7.8	0	3.0	3.3			
High school education (%)	38.1	40.0	37.1	16.7	33.8	.08	.08	.02
Speak English easily (%)	70.6	40.0	61.5	34.8	54.4	<.001	.34	<.001
Read English easily (%)	74.1	44.6	63.1	50.0	59.8	<.001	.60	<.001
Problems learning English (%)	48.2	49.2	35.2	75.8	49.1	<.001	.88	<.001
Immigration factors								
Age when left home country (yrs)	13.1 (2.9)	14.5 (4.8)	15.8 (2.9)	15.8 (3.0)	14.9 (3.5)	.07	<.001	<.001
Time in transit (yrs)	5.4 (2.9)	4.7 (2.6)	3.6 (2.4)	3.1 (2.0)	4.2 (2.7)	.04	<.001	<.001
Time in U.S. (yrs)	2.9 (2.4)	2.3 (2.2)	1.5 (1.3)	1.5 (1.3)	2.0 (1.9)	.19‡	.003‡	<.001
First came to U.S. with family (%)	15.9	25.8	67.5	57.8	44.8	.43	<.001	<.001
Current situation								
Living situation** (%)								
With parents	16.5	13.8	12.3	21.2	15.4	.38	.98	.42
With siblings	10.6	6.2	29.5	25.8	19.5	.20	<.001	<.001
With spouse	2.4	15.4	7.4	13.6	8.9	.004	.61	.018
With friends	36.5	26.2	35.2	19.7	30.8	.013	.66	.08
Alone	21.2	6.2	7.4	10.6	11.2	.19	.08	.008
Other	3.5	3.1	1.6	0	2.1	.58	.15	.44
Where do you live?** (%)								
Own or rent house/apt.	69.4	52.3	35.2	56.1	51.2	.38	<.001	<.001
With family member	20.0	30.8	31.1	30.3	28.1	.43	.21	.29
With friend(s)	15.3	15.4	28.7	12.1	19.5	.03	.08	.01
Other	0	0	.8	1.5	.6	.74	.21	.58
Why did you leave home?* (%)								
Get a job	11.8	20.0	3.3	1.5	8.3	.20	<.001	<.001
Have a better life	27.1	29.2	5.7	4.5	15.4	.57	<.001	<.001
Get an education	50.6	50.8	5.7	3.0	25.1	.60	<.001	<.001
Reunite with family	12.9	4.6	4.9	4.5	6.8	.20	.10	.08
Worried over my safety	65.9	60.0	59.8	84.8	66.3	.05	.31	.004
Worried over safety of family	29.4	50.8	37.7	27.3	36.1	.39	.38	.018
Employment								
Employed (%)	51.2	38.5	60.7	37.9	49.4	.001	.22	.005
Satisfied with employment*	68.6	69.6	71.8	84.0	72.3	.39	.39	.54
Special training in home country helped to get job in U.S.	3.4	3.2	13.4	1.52	6.0	.02	.10	.007
Good opportunity to work in U.S.	92.8	91.9	96.5	100.0	95.4	.63	.02	.09
Currently responsible for caring for children (%)	7.7	38.7	24.4	18.5	21.7	.02	.92	<.001
Problems getting a job‡	25.9	29.2	17.2	34.8	25.1	.02	.41	.046

* Percentages may not reach 100% because of missing values or rounding. Variables with missing values exceeding 10% are noted with*.

** Percentages may not approximate 100% because participants could respond to more than one category.

‡ Wilcoxon-Mann-Whitney ranks test.

($p < .001$). Differences among ethnic groups were statistically significant for all of the above items.

For the most part, there were no significant gender differences in the reasons these young people left their home countries, whereas there were some ethnic differences. About two-thirds (66%) of the sample reported leaving home because they were worried about their own safety and about one-third (36%) as

Table 2. History of Trauma/Torture and Current Physical, Psychological and Social Problems Among Somali and Oromo Youth (Aged 18–25 years)

	Somali Male Mean (SD)	Somali Female Mean (SD)	Oromo Male Mean (SD)	Oromo Female Mean (SD)	All Mean (SD)	*p*-Value Male vs. Female	*p*-Value Somali vs. Oromo	Overall *p*-Value
History of trauma (count — 57 items)	9.6 (6.6)	12.3 (7.5)	22.2 (9.6)	23.2 (6.3)	17.3 (9.9)	<.001	.039	<.001
History of torture‡ (count — 61 items)	1.2 (3.4)	2.3 (4.6)	6.3 (8.2)	2.3 (4.1)	3.5 (6.3)	.25	<.001	<.001
Social problems‡ (15 items)	5.1 (2.3)	6.8 (3.8)	5.0 (2.0)	8.9 (2.5)	6.1 (3.0)	<.001	.10	<.001
Psychological problems‡ (11 items)	.98 (.91)	1.7 (1.4)	2.4 (1.9)	2.2 (1.5)	1.9 (1.6)	.09	<.001	<.001
Physical problems‡ (13 items)	1.7 (1.2)	1.5 (1.6)	3.5 (2.6)	1.7 (1.6)	2.3 (2.2)	<.001	<.001	<.001
PCL-C total score (17 items)	24.4 (7.1)	29.8 (12.7)	42.8 (13.6)	30.0 (9.3)	31.8 (13.0)	<.001	.005	<.001

‡ Wilcoxon-Mann-Whitney ranks test.

a result of worry over the safety of their families. Somali young people were much more likely to report coming to the United States for a better life or to get a job or education than Oromo youth (p-values $< .001$), but for both groups safety was the major reason.

Current Situation

More young people reported living with friends (30.8%) than with parents (15.4%) or siblings (19.4%). Women were more likely than men to be living with a spouse ($p = .004$), but this represented only about one in seven women (15.4% Somali, 13.6% Oromo). About one-half of the total group reported that they owned a house or rented an apartment, with Oromo men least likely of the four groups to have their own place (overall $p < .001$). Others were living in the house or apartment of a family member or friend. About one-half of participants (49.4%) were employed at the time of interview. Young men were more likely to be employed than women (56.5% vs. 38.2%, $p = .001$). One in five men (20.8%) and one in three women (32.1%) reported they had trouble getting a job. Somali women were the most likely to have childcare responsibilities among the groups, and more Somali young women were mothers than Oromo women (39% vs. 19%, $p = .01$).

Past Trauma/Torture and Current Problems

There were statistically significant differences for nearly all trauma/torture counts and problem scales by ethnicity and gender (Table 2). Oromo males reported experiencing higher incidence of items classified as torture (mean 6.3) than the other groups, and Oromo youth of both genders reported significantly more traumatic events than Somalis ($p = .04$). No ethnic differences in average number of social problems were found ($p = .10$), but females had more social problems than males ($p < .001$). Post hoc pairwise comparisons indicated that Somali and Oromo men had similar levels of social problems and that Oromo women had a significantly higher level than all other groups ($p < .01$). The average number of psychological problems reported by the groups, although statistically different ($p < .001$), may be of little practical importance given the narrow range (1.0–2.2).

There was an association between trauma and torture counts and some problem scales. Higher levels of reported trauma were moderately to strongly correlated with psychological problems ($\rho = .65$), physical problems ($\rho = .61$), and PCL-C scores ($\rho = .54$), and weakly associated with social problems ($\rho = .22$). Similar associations were found for torture counts and psychological problems ($\rho = .58$), physical problems ($\rho = .48$), and PCL-C total scores ($\rho = .54$), and a weak correlation with social problems ($\rho = .04$). All correlations were significant at the .01 level (two-tailed) with the exception of the correlation between torture and social problems.

Perceptions of Life in the United States and Evidence of Coping

There were key differences among the four gender and ethnic groups in their subjective experience of

Table 3. Perceptions of Life in the United States and Evidence of Coping of Somali and Oromo Youth (Ages 18–25 years)

	Somali Male	Somali Female	Oromo Male	Oromo Female	All	p-value male vs. female	p-value Somali vs. Oromo	Overall p-value
Receive much or more respect in U.S. (%)	64.6	68.9	88.8	96.9	80.7	.34	<.001	<.001
Thinks made the right choice in coming to U.S. (%)	81.7	38.7	90.7	97.0	79.9	<.001	<.001	<.001
Plan to return to home country to live (%)	19.5	57.1	80.3	87.9	62.2	<.001	<.001	<.001
Strategies to help self when feeling sad (%)								
Pray	65.9	49.2	40.2	75.8	55.3	.03	.27	<.001
Sleep	63.5	41.5	30.3	25.8	39.9	.06	<.001	<.001
Read	44.7	41.5	17.2	34.8	32.3	.06	<.001	<.001
Talk about problems with friends	15.3	33.9	18.0	56.1	27.8	<.001	.10	<.001
Watch TV	18.8	12.3	17.2	27.3	18.6	.65	.27	.16
Exercise	9.4	7.7	16.4	1.5	10.1	.008	.45	.01
Go to clubs	12.9	12.3	2.5	0	6.5	.81	<.001	.001
Go to work	2.4	3.1	6.6	0	3.5	.11	.43	.11
See doctor	1.18	0	3.3	0	1.5	.07	.27	.19
Take medicine	0	1.5	0.8	0	0.6	.74	.87	.57
Other	0	4.6	2.5	6.1	3.0	.04	.35	.14

life in the United States (Table 3). More Oromo women (87.9%) and fewer Oromo men (15.6%) reported they found American life hard to understand compared with Somalis (44.7% female, 50.8% male). Over one-third (38.5%) of young people in this sample reported feeling alone in the United States, women much more than men (Somali females 49.2%, Oromo females 72.7% compared with Somali men 30.6%, Oromo men 19.7%). Few reported decreased religious beliefs since immigrating (range 1.5–6.5%). Very few young people, less than 5% in any group (1.5% total), reported bad treatment by people in the United States (overall $p = .08$). In fact, most reported that they received more or much more respect in the United States than in their home countries, and four-fifths thought that they had made the right choice by coming here. Notably, over one-half (62.2%) of the young people surveyed planned to return home to live. Male and female youth differed in their strategies for coping with sadness. Young women were more likely to talk about their problems with friends (45% vs. 17%, $p < .01$), whereas young men were more likely to cope by exercising (14% vs. 5%, $p < .01$).

Factors Associated With Low PTSD Symptoms

Those in the lowest quartile of PCL-C scores (PCL total ≤ 22) were compared with those in the upper three quartiles (PCL total > 22) to describe characteristics associated with lower likelihood of PTSD symptoms. No statistically significant demographic differences were found associated with low PCL-C scores. Those who reported fluency in spoken English were more likely to have low PCL-C scores (67% vs. 50%, $p = .01$). Immigration factors were also associated with low PCL-C scores. Those in the lowest quartile were more likely to have left home at a younger age (14.0 vs. 15.2 years, $p = .04$). They were more likely to have first come to the United States with family members (73% vs. 53%, $p < .01$) and to have been in the United States longer (2.7 vs. 2.0 years, $p = .02$). Current living situation or employment factors did not appear to be associated with their level of PTSD symptoms. Those in the lowest PCL-C quartile had lower trauma and torture counts (11.1 vs. 19.2, p-values $< .001$ for trauma; 1.2 vs. 4.2, $p < .001$ for torture). They also had lower average numbers of social (6 vs. 7, $p = .01$), psychological (1 vs 2, $p < .001$), and physical problems (2 vs. 3, $p < 001$). A significantly higher proportion of those with low PCL-C scores reported that one of the reasons they came to the United States was to have a better life (26% vs. 13%, $p = .01$), and they were less likely to plan to return home (45% vs. 67%, $p < .001$). These associations were also found when PCL-C was analyzed as a continuous variable using Spearman's

rho. Of the above variables, only lower trauma count was associated with lowest quartile PCL-C scores on multivariable analysis.

Factors Associated With Wanting to Return Home to Live

Participants reporting that they planned to return home to live were compared with those not planning to return home. A greater proportion of those planning to return home than not planning to return home were female (46% vs. 28%, $p = .001$). Again, immigration factors were predictors. Those planning to return home were older when they emigrated (15 vs. 14 years, $p < .001$), had less time in transit (4 vs. 5 years, $p < .001$), and were more likely to have left family members behind (68% vs. 39%, $p < .001$). Having plans to return home was associated with their reasons for coming to the United States. Those who came to get a job or education, have a better life, or reunite with family were less likely to plan to return home. Those planning to return home had higher mean trauma counts (20 vs. 14 items endorsed, $p < .001$), torture counts (4 vs. 3 items, $p = .002$), and higher PCL-C scores (34 vs. 28, $p < .001$).

Discussion

This study helps to provide a picture of Somali and Oromo refugee youth, both their current situation and their immigration experience, and describes some important similarities and differences among genders and ethnic groups. Using problem scales and extensive questioning about their history of trauma and torture, the results highlight several problem areas; however, many of these refugee youth seem to be doing well, as evidenced by low levels of social, psychological, and physical problems.

The high correlation between trauma/torture and psychological as well as physical problems is consistent with findings of other studies in different populations of refugee youth. A number of studies found that refugee survivors of war trauma and torture experience a range of physical and psychological problems, such as PTSD, other anxiety disorders, and depression [29–31].

Little demographic difference existed between the two ethnic groups included in this study. Immigration experiences differed, however, as well as reported incidence of events categorized as torture or trauma. It is important to note that we did not assess for severity of trauma; our trauma count may approximate severity but does not equate it. Oromo youth also had higher scores for psychological and physical problems and PTSD symptom scales. Despite higher reported levels of past trauma and current problems, Oromo youth were more likely to report that they received much or more respect in this country and that they made the right choice in coming to the United States. This finding may reflect the minority status of Oromo people in Ethiopia compared with the majority status of Somali refugees in their home countries before emigration. Oromo youth were also more likely to plan to return home to live, perhaps reflecting a hope for sociopolitical changes in their home country. The lower likelihood of Somali youth planning to return home may be related to continuing political instability in Somalia.

These results highlight important gender differences in these groups of young people, including differences in their problem status and coping methods. The greater written and verbal English fluency of men suggests higher ability to negotiate daily life in the United States. Although common wisdom suggests that men are more likely to have war trauma experience, it is important to note that in these populations, trauma counts were higher on average among women than men. Women reported higher levels of social problems, but men reported higher levels of physical problems and PTSD symptoms. Young women were less likely than men to report that they made the right choice in coming to the United States. This finding may be less surprising when one considers language barriers and lifestyle differences for East African women in the United States compared with their experience in their home countries. Home country lifestyles before conflict were often more relaxed and consisted of close living situations that included assistance with chores and parenting compared with the isolation often inherent in nuclear family lifestyles in the United States.

Women and men differed in their coping strategies when feeling sad. This finding seems consistent with the work of Taylor et al [32] showing that women are more likely to respond to stress by grouping together with other women (tend and befriend) than the more typically male "fight or flight" response. The tendency of males more than females in this sample to exercise as a means of coping may add support to the above theory that males more likely respond with action. Alternatively, it may reflect fewer opportunities for exercise for these young women.

Somali and Oromo refugees, including youth, have survived extreme trauma. They have demonstrated remarkable strengths as survivors of war and torture and throughout the relocation process, but many continue to experience mental and emotional problems. Even youth from the same region of Africa, such as Somalia and Ethiopia, have different experiences and problems. Past life experience and current status or needs cannot be generalized across genders or ethnic groups.

The cross-sectional design of the study precludes inference of causality or temporality from associations, and the possibility of recall bias must be considered because of the survey methods used. The design of the study also cannot separate the experience of trauma from the experience of immigration. In addition, generalizability is limited with nonprobability sampling methods. Without the availability of a complete sampling frame, we lacked the ability to assess true representativeness of the sample; however, comparison with available local population data from publicly available records yielded no large discrepancies [33], suggesting an analyzable sample.

Additional studies, especially qualitative studies such as focus groups and in-depth interviews, are needed to further explore strengths and coping skills as well as the meaning and implication of these findings. The differences between gender and ethnic groups suggest the need for development of brief assessment tools for use in tailoring programs and services for population subgroups and their unique situations. Attention to the needs of isolated youth, especially females, is also suggested, and is reinforced by a Minneapolis-based survey of Somali and Ethiopian parents of young children where more than one in four identified feeling socially isolated [34]. Future studies that can differentiate among factors associated with trauma and those associated with immigration are needed. Such studies could build in the capacity to control for degree of trauma exposure or could include comparison groups of traumatized youth that have not immigrated.

Cultural barriers and stigma are a major problem for immigrants and contribute to their reluctance to pursue Western mental health services on either a group or individual level despite self-identified needs [35,36]. Unfortunately, in spite of the widely appreciated magnitude of problems related to trauma, little progress has been made in discovering culturally acceptable and less intensive intervention approaches which improve symptoms, coping skills, and the quality of life for refugees. Community-oriented, culturally sensitive mental health services may encourage more young refugees to develop trust, draw on their own strengths and resilience, and reintegrate with their families and communities [37–41].

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