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Unsettled; Mental Stress in Community-Living Adolescents who are Seeking Asylum in Australia

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Abstract:

Objectives: This pilot study explored post-traumatic stress symptoms (PTSS) and moderate to severe psychological distress in a small sample of urban community-living adolescents seeking asylum in Australia. The study also examined the relationships between post-traumatic stress symptoms (PTSS) and psychological distress and school and family support and connectedness.

Method: A cross-sectional survey examined PTSS (Abbreviated PTSD Checklist), psychological distress (Kessler-5) and school connectedness (California Healthy Kids Survey)[53] in 27 adolescents seeking asylum (ages 12-17, mean 15.4) attending two independent secondary schools in Perth, the capital city of Western Australia.

Results: In the sample, 63.0% (n=17, 1 missing) of adolescents exceeded the PTSS threshold (i.e. screened positive for Post-traumatic Stress Disorder) and 66.7% (n=18) exceeded the Kessler -5 threshold indicating moderate to severe psychological distress. Overall, 51.9 % (n=14, 1 missing) of adolescents screened above both thresholds suggesting co-occurrence of PTSD and moderate to severe psychological distress. Boys ($\bar{x}$=15.0, SD=2.9) experienced higher psychological distress scores than girls ($\bar{x}$=12.1, SD=4.5; p=0.071). Higher perceived support by an adult in school (r=0.13), and at home (r=0.28) were weakly associated with lower PTSS. Less time in Australia was weak-moderately associated with higher psychological distress (r=0.35). Weak associations between higher psychological distress and age (r=0.17) and those who felt more supported by an adult at home (r=0.17) were detected.

Conclusion: Approximately two thirds of this group of community-living adolescents who were seeking asylum experienced post- traumatic stress symptoms or psychological distress; and more than one half experienced both. These pilot research findings suggest that adolescents who are seeking asylum and living in the Australian community are at risk of experiencing PTSD and moderate to severe psychological distress; research incorporating larger samples and longitudinal measurement is required. Screening, clinical assessment and examination of the immediate and long term impact, as well as implementation and evaluation of evidence-based mental health interventions, within these populations is also recommended.

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Introduction :

There is an emerging international crisis with conflict and persecution leading to more people leaving their homes and being displaced than at any other time since records began (United Nations High Commissioner for Refugees, 2015)[51]. Statistics are alarming; globally one person in every 122 is now either a refugee, internally displaced (forced to leave their homes but who have not crossed an international border), or seeking asylum (seeking international protection whose claims for refugee status have not yet been determined). In Australia, although the majority of people seeking asylum (known as "asylum-seekers") are detained in detention centres, some have been moved into the community (community-living) whilst their asylum claims are being assessed (Australian Human Rights Commission, 2012;[3] Fleay et al., 2013)[13]. Presently, those who arrived by boat between October 2010 and 13 August 2012, however, are unable to lodge an asylum seeking claim thus unable to live in the community. On 5 September 2013, there were 1,395 children (aged under 18) seeking asylum living in the Australian community (Australian Human Rights Commission, 2012).[3]

People seeking asylum have often been exposed to highly traumatic events in their country of origin including war, threatened death, serious injury, persecution and/or famine (Steel and Silove, 1998)[44]. The 'asylum-seeking' process itself, including travel from overseas, subsequent periods of detention (Steel and Silove, 1998),[44] and/or fear of forceful removal and insecurity of tenure (Reesp, 2003),[39] also considerably increases susceptibility to negative mental health outcomes for individuals. Issues such as discrimination, poverty and denial of healthcare and employment further impact on the mental wellbeing for those seeking asylum and living in the community (Steel and Silove, 1998)[44]; McColl et al., 2008[30]; Fleay et al., 2013)[13.] Between 37% and 77% of adults seeking asylum experience Post-traumatic Stress Disorder (PTSD), and are ten times more likely to have PTSD than an individual within the general population (Laban et al., 2004)[25] (Keller et al., 2003)[21] (Fazel et al., 2005)[12] Steel and Silove, 1998).[44] The burden of this is immense: refugees or those seeking asylum, have high levels of distress, social impairment (Momartin et al., 2004)[33] employment disability, unemployment, educational attainment and decreased earning capacity (Steel et al., 2009).[42] In addition, there is evidence that PTSD and resettlement stress may cause drug misuse in response to trauma-associated flashbacks, nightmares/ painful hyper-arousal symptoms, or adaptation and resettlement worries in a foreign country (Weaver and Roberts, 2010).[52]

Although it is well-established that PTSD is highly disruptive during developmental years, there are few studies relating to trauma or the mental health of children and adolescents who are seeking asylum (Earnest et al., 2007)[10] Ziaian et al., 2013). [55]Adolescents with past traumatic experiences are more likely to display conduct disorder and aggression, drop out of school and experience lower academic performances (Gerson and Rappaport, 2013).[15] There is also increased suicidal ideation and attempts in these adolescents (Gerson and Rappaport, 2013)[15]; Gradus et al., 2010)[16]. Encouragingly, higher feelings of support and connect-

edness (protective relationships between individuals and their community (Whealin et al., 2013)[54] have been linked with lower Post-Traumatic Stress Symptoms (PTSS) (McDermott et al., 2012)[31]. For adolescents, feeling connected involves being in contact with friends, trust in others, a sense of belonging and participation in community, such as their school (McDermott et al., 2012) [31]. A longitudinal Australian study of secondary school students identified that feeling connected to school in year eight may be important for good mental health outcomes in later years (Bond et al., 2007)[6]. One study of adolescents from Bosnia and Herzegovina (living as displaced persons in Bosnia or as immigrants in Croatia and Austria) found a correlation between school connectedness and self-esteem, and that poor social support was associated with increased depression (Sujoldžić et al., 2006)[47]. Social support from peers has also been found to be important for psychosocial adjustment of adolescents with refugee status settling in South Australia (Kovacev and Shute, 2004). [24]However, knowledge regarding support and connectedness in community-living adolescents seeking asylum remains sparse; this is despite the fact that this population is very likely to face problems socially, emotionally and academically (Gerson and Rappaport, 2013; [15] Reed et al., 2007). [38]

Whilst there is preliminary information about mental stress in adults' seeking asylum, at present, there is little existing data published about adolescents. Further. there is limited about demographic and emotional factors associated with post-traumatic and psychological stress. Thus this research focused on generating preliminary data to help fill this void. The primary aim of this pilot study was to identify the proportion of adolescents exceeding thresholds for post-traumatic stress disorder and psychological distress in a small sample of community-living adolescents seeking asylum within an urban capital city in Western Australia. The secondary aim was to examine the relationship between post-traumatic stress disorder and psychological distress and perceptions of support and connectedness with school and family for adolescents seeking asylum.

Methods

Design and Setting

This cross-sectional quantitative study was conducted in the Perth metropolitan area of Western Australia. A survey collecting self-report data within two independent schools was completed between the months of May and July in 2014.

Participants

Purposeful sampling was used to identify community-living adolescents seeking asylum and residing in the Perth community. Principals at two independent schools (both Catholic) were contacted by the research team and asked if they were willing to allow students to participate in the study. These schools run Intensive English Language Centres (IELC; partially funded by the Commonwealth) to assist with teaching English to newly arrived adolescents with refugee status or those seeking asylum. These students are enrolled in these centres for 6 to 12 months before they enter mainstream classes at the school.

Following school recruitment, the principal at each school selected a school liaison from the IELC to assist the research team to distribute and collect consent forms and administer questionnaires. Participants were selected from the IELC based on the following inclusion criteria: (i) aged 12 to 17 years inclusive, (ii) currently holding a bridging visa and seeking asylum, (iii) currently living in the Western Australian capital (Perth) community, and (iv) sufficiently proficient in English to understand and complete the questionnaire. Parental/ guardian consent was required for all participants. The IELC school liaison requested that they exclude any student they perceived to have a cognitive impairment or altered mental state from the study (however, no students met this criteria at the time of participant recruitment).

Variables

A print questionnaire was used to collected data. This incorporated measures of; i) PTSS, ii) psychological distress, iii) perceived connectedness to school, iv) perceived support from an adult at school, and v) perceived support from an adult at home. Details of the instruments are provided below.

Data Collection Procedures

Ethical approval was obtained through the institutional Human Research Ethics Committee. Eligible participants (41 meeting inclusion criteria, 0 were excluded) were provided with an information sheet and consent form by school staff who also described the study to the adolescents. Separate information sheets and consent forms were given to adolescents' parents/ guardians and the study explained to them. To ensure that there was appropriate follow-up care for the study participants, each information and consent form explicitly indicated that the school liaison would be provided with the adolescent's total score for PTSD symptoms and/or psychological distress in instances where distress levels exceeded thresholds. Twenty-seven students returned consent forms (response rate=65.8%) and all these consenting students completed a questionnaire during school time with the school liaison present to assist.

Survey Design, Validity and Reliability

The questionnaire comprised demographic questions (gender, age, date of birth, country of birth, length of time in Australia, English competency, length of time in current school) and the following instruments: (1) Abbreviated PTSD Checklist (PCL-6) – Civilian Version (Lang and Stein, 2005)[26], (2) modified Kessler Psychological Distress Scale (K5) (Australian Institute of Health and Welfare, 2009)[4], and (3) the California Healthy Kids Survey (CHKS) (WestEd for the California Department of Education, 2011).

The Abbreviated PTSD Checklist (PCL-6) PCL-6 was chosen due to its brevity and good psychometric properties (Lang et al., 2012)[27]. The instrument includes 6 questions asking respondents to indicate, how much, in the last month (1=not at all; 2=a little bit; 3=moderately; 4=quite a bit; 5=extremely), they had been affected by: (i) repeated, disturbing memories, thoughts, or images of a stressful experience; (ii) feeling very upset when reminded of a stressful experience; (iii) avoidance of activities or situations that were reminders of a stressful experience; (iv) feeling distant or cut off from other people; (v) feeling irritable or having angry outbursts; and (vi) having difficulty concentrating. PTSS responses were summed to generate a total PTSS score (resultant score between 6 and 30). A threshold of 14 on the PCL-6 results in a sensitivity of .80 and a specificity of .76 for detecting Post-Traumatic Stress Disorder (Lang and Stein, 2005).[26]

2) The K6 (Kessler et al., 2002) [22]measures psychological distress and has been shown to highly correlate with clinically diagnosed serious mental disturbance (as defined by the Diagnostic Statistical manual IV (American Psychiatric Association, 1994)[1] in adolescents aged 13–17 (Li et al., 2010).[28] The K-6 predictive value (area under the curve) of serious emotional disorder is 0.74 (Kessler et al., 2003).[56] The K5 (Australian Institute of Health and Welfare, 2009)[4] is an adapted 5 item form of the K6 for Australian Aboriginal populations. This adaptation, reported in Measuring the Social and Emotional Wellbeing of Aboriginal and Torres Strait Islander Peoples (Australian Institute of Health and Welfare, 2009) [4], incorporated the removal of the question regarding 'I feel worthless' due to its potential to be offensive to Aboriginal and Torres Strait Islanders. This instrument asks respond-ents During the past 30 days, about how often did you feel; a) nervous b) hopeless, c) restless or fidgety, d) so depressed that nothing could cheer you up, e) that everything was an effort with response options; 1=none of the time, 2=a little of the time, 3=some of the time, 4=most of the time, and 5=all of the time. Responses

were summed to generate a total psychological distress score (resultant score between 5 and 25). Higher scores on the K5 indicate greater distress; a score of 13 or higher indicates the respondent is likely to be experiencing moderate to severe levels of distress consistent with a diagnosis of a moderate to severe depression and/or anxiety (Kessler et al., 2003)[56].

The California Healthy Kids Survey (CHKS)[53] includes 25 questions comprising three subsets; i) connectedness to school (n= 13; e.g. I feel close to people at this school) with response options- Strongly disagree=1, Disagree=2, Agree=3, and Strongly agree=4, ii) support from a school staff member (n=6; e.g. At my school, there is a teacher or some other adult who really cares about me) with response options- Not at all true=1, A little true=2, Pretty much true=3 and Very true=4, and iii) support from a significant adult at home (n= 6; e.g. A parent or some other grown–up at home cares about my schoolwork) with response options No , never =1 Yes, some of the time=2 Yes, most of the time=3 Yes, all of the time=4. Total scores for each subset and total school and home connectedness were calculated.

Processes for safeguarding adolescent participants

Scores and names of participants classified as having moderate to severe psychological distress (score of 13 and above) and/or possible PTSD (PTSS scores of 14 or above) were provided to the school liaison.

Data Analysis

In instances of one missing data value within one construct, the individual's average response for that construct was imputed (PTSS; n=1, psychological distress n=4). Data were excluded for that construct if two or more responses were missing (PTSS, n=1). The responses obtained from the questionnaire were analysed with SPSS V21. Pearson's correlation coefficient or Spearman's rank correlation coefficients were calculated to examine the association between continuous variables.

Results :

Demographics

Table 1 displays participant demographic and PTSD and psychological distress classifications summary statistics. The sample comprised just over one half boys (55.5%), and adolescents from at least ten different countries (six participants did not indicate their country of origin). Specific time in detention was not available for participants; however the school indicated that participants had been in a detention centre for between 2 and 24 months prior to living in the community and attending the school. Table 1 also displays the proportion of participants who exceeded thresholds for PTSS and psychological distress. Nearly two thirds of the sample were screened as having possible PTSD and two thirds with moderate to severe psychological distress. Just over one half of the sample were noted to be experiencing PTSS above the normal threshold in combination with moderate to severe psychological distress.

Table 2 displays the distributions for post-traumatic stress symptoms (PTSS), psychological distress scores, and support and connectedness (means and standard deviations (SD) are displayed for normally distributed and median and interquartile range (IQR) for skewed variables). Sex differences in these constructs are also displayed in Table 2. PTSS and psychological distress data were approximately normally distributed. The Pearson's correlation coefficient for the association between PTSS and psychological distress was moderate with r=0.50 (p=0.005). Girls reported feeling more connected to the school (p=0.004) and that they experienced both higher support from school staff (p=0.021) and higher total school and home connectedness/support (p=0.009) compared with boys. Boys reported higher psychological distress than girls, although this difference was only close to significant (p=0.07).

Table 1: Participant demographics and post-traumatic and psychological distress; 27 community-living adolescents seeking asylum, Perth Western Australia (n=27).

Variable	Category/summary statistic	
Sex	Male; n (%)	15 (55.6)
	Female; n (%)	9 (33.3)
	Undisclosed; n (%)	3 (11.1)
Age	Min	12
	Max	17
	Mean *sd*	15.4 *1.5*
Time in Australia (months)	Min	6
	Max	27
	Mean *sd*	13.0 *5.7*
Country of Origin	Afghanistan (n)	7
	Burma (n)	3
	Cambodia (n)	1
	Eritrea (n)	1
	Iran (n)	1
	Kenya (n)	1
	Malaysia (n)	2
	South Sudan (n)	3
	Sri Lanka (n)	1
	Thailand (n)	1
	Undisclosed (n)	6
PTSD threshold[a]	below; n (%)	9 (33.3)
	above; n (%)	17 (63.0)
	missing; n (%)	1 (3.7)
Psychological distress[b]	none-mild; n (%)	9 (33.3)
	moderate- severe; n (%)	18 (66.7)
Exceeds PTSD [a] threshold AND experiences moderate to severe sychological distress[b]	n (%)	14 (51.9)

PTSD= Post-Traumatic Stress Disorder,

[a] 6-item PTSD Checklist (PCL-6) – Civilian Version; possible range= 6-30 (≥ 14 above 'normal' threshold i.e. screen positive for PTSD)

[b] modified Kessler Psychological Distress Scale (K5); possible range=5-25 (≥ 13 above 'normal' threshold i.e. screen positive for moderate to severe mental distress)

Table 3 displays the correlations between PTSS and psychological distress and support and connectedness. Very weak to weak negative correlations were detected between PTSS and feeling supported by school staff (r = -0.13), feeling supported at home (r =-0.28), and total school and home connection and support (-0.10). Age was weakly positively correlated with PTSS (r =0.20). Weak positive correlations were identified between psychological distress and feeling supported by an adult at home (r =0.17) and age (r =0.17). A weak to moderate negative correlation was identified between psychological distress and time in Australia (r =-0.35).

Discussion :

This study appears to be one of the first to investigate mental stress in Australian community-living adolescents who are seeking asylum. Nearly two thirds (63.0%) of the sample exceeded the PTSS threshold (i.e. screened positive for PTSD) and two thirds (66.7%) exceeded the psychological distress threshold consistent with a diagnosis of a moderate to severe depression and/or anxiety disorder. Of further concern, just over one half the sample (51.9%) screened above both PTSS and psychological distress thresholds suggesting co-occurrence of PTSD and moderate to severe psychological distress.

The high prevalence of mental stress symptoms found in this pilot research suggests that intervention and further research examining mental health in adolescents who are seeking asylum should be a priority for policy makers, researchers and practitioners. For people seeking asylum, a predisposition to psychological distress arises from war trauma, experiences of famine and displacement and post-migration stress (Silove et al., 1997; [41]Murray et al., 2008)[34]. Added to this burden is that 20%-40% of people seeking asylum have experienced a history of exposure to torture (Steel et al., 2004).[43] Additional factors leading to post-migration

Table 2: Distribution of post-traumatic stress symptoms (PTSS), psychological distress and feelings of support and connectedness in 27 community-living adolescents seeking asylum.

Construct subcomponent	n	Girls	Boys	Overall^
Total school & home connection/ support[a]; mean *(SD)*	27	90.9 *(3.8)***	83.3 *(8.9)***	85.6 *(8.0)*
i) Connectedness to school; median (IQR)	27	49.0 *(3.5)***	43.0 *(8.0)***	46.5 *(8.0)*
ii) Supported by school staff; *mean (SD)*	27	20.9 *(1.5)**	18.7 *(2.4)**	20.9 *(1.5)*
iii) Supported at home; median *(IQR)*	27	21.0 *(2.5)*	21.0 *(4.0)*	21.0 *(3.0)*
PTSS[b]; mean *(SD)*	26	15.7 *(6.8)*	17.0 *(5.8)*	16.2 *(5.8)*
Psychological distress[c]; mean *(SD)*	27	12.1 *(4.5)* ^	15.0 *(2.9)* ^	13.7 *(3.7)*

PTSS =post-traumatic stress symptoms; IQR= interquartile range, ^ includes missing gender,

*^p <0.1, *p <0.05,**p<0.01 analyses of differences between boys and girls within same construct (or subcomponent)*

[a] California Healthy Kids Survey; possible range= 25- 100

[b] 6-item PTSD Checklist (PCL-6) – Civilian Version; possible range= 6-30 (≥ 14 above 'normal' threshold i.e. screen positive for PTSD)

[c] modified Kessler Psychological Distress Scale (K5); possible range=5-25 (≥ 13 above 'normal' threshold i.e. screen positive for moderate to severe mental distress)

Table 3: Relationships between post-traumatic stress disorder symptoms and psychological distress and support and connectedness in 27 community -living adolescents seeking asylum.

Variable	PTSS[a] n=26		Psychological distress[b] **n=27**	
	r	p **value**	r	p **value**
Time in Australia	0.06	0.767	-0.35	0.129
Age	0.2	0.336	0.17	0.403
Total school & home connection/ support	-0.1	0.499	-0.04	0.854
i) Connectedness to school	0.02	0.902	-0.05	0.813
ii) Supported by school staff	-0.13	0.542	-0.06	0.776
iii) Supported at home	-0.28	0.161	0.17	0.403

PTSS =post-traumatic stress symptoms, r = correlation coefficient

[a] 6-item PTSD Checklist (PCL-6) – Civilian Version; possible range= 6-30 (≥ 14 above 'normal' threshold i.e. screen positive for PTSD)

[b] modified Kessler Psychological Distress Scale (K5); possible range=5-25 (≥ 13 above 'normal' threshold i.e. screen positive for moderate to severe mental distress)

stress for refugee adolescents include; adjustment to a new school, marginalisation due to language and cultural differences, discrimination, inter-generational conflict and long-term parental unemployment (Hyman et al., 2000; [19]Fozdar, 2009[14]; Tilbury, 2007)[49]. In addition, cultural and family belief systems and pre-conceived notions regarding mental issues may be barriers to seeking professional help (O'shea et al., 2000).[35] It is also important to note than many young people seeking asylum are unaccompanied minors (nearly one third in 2012-13(Commonwealth of Australia; Department of Immigration and Citizenship, 2013)).[7] For children granted formal refugee status in Australia, the rates of PTSD have been reported at around 11% (Murray et al., 2008).[34] Although our study measured post-traumatic stress symptoms, as opposed to a diagnosis of PTSD, our results suggest that young people seeking asylum may be in a state of heighted trauma related stress compared to refugees. Further, in addition to the cultural barriers, limited access to health care for the young people seeking asylum (Milosevic et al., 2012) [32]may reduce the likelihood of their receiving mental health support other than that offered by the school. It is possible that one contributory factor to the feelings of stress in our study sample relates to the indeterminacy of their residency status and the possibility of being returned to their country of origin. Adolescents who are seeking asylum are highly vulnerable; increased attention to the potential impact of these combined stressors is vital.

The association between gender (i.e. being male) and higher psychological distress found in this study is congruent with international research (Fazel et al., 2012)[11]. This also suggests that a particular focus is required to ensure that boys are engaged in programs that reduce their levels of psychological distress and PTSS, particularly as they report feeling lower levels of connectedness and support in the school and home environment. This study also found that longer time in Australia was associated with lower psychological distress but not lower PTSS. This may be because the adolescents in our sample who had resided in Australia longer were starting to feel more secure in a 'safe' country thus reducing psychological distress. Such findings signal the pressing need for further research to

examine the trajectory of PTSS for adolescents who are seeking asylum and refugees (Thomas and Lau, 2002)[48] as well as the instigation of treatment strategies to help reduce the burden of this emotional trauma. While little can be done about pre-migration experiences for trauma, symptoms can improve when adequate treatment is provided (Stenmark H, 2013)[46]. Post-migration trauma can also be reduced through support from government funded services and generating more positive societal attitudes towards asylum-seekers (Tilbury, 2007[49]; Fozdar, 2009[14]; Pedersen et al., 2012).[37]

School connectedness has previously been associated with lower depression in young people more generally (Kia-Keating and Ellis, 2007).[23] Although we found no relationship between feeling of connectedness to the school as an entity and PTSS or psychological distress, this may be due to the overall high scores and low variability for school connectedness and/or our sample size. The schools in our study have a strong emphasis on pastoral care, as exemplified by the employment at one school of a family liaison (who visits families at home and assists with integration of adolescents into the school). It is also worth noting that friendships are particularly important for refugee adolescents (Kovacev and Shute, 2004) [24] and with mid-adolescence being a highly social time for youth (Blakemore, 2008;[5] Steinberg and Morris, 2001)[45], future research examining friendships, loneliness and connectedness to peers is needed.

Unexpectedly, there was some suggestion in our results that lower psychological distress was associated with lower levels of perceived support by a significant adult at home. This may reflect higher levels of support provided by parents/caregivers for children exhibiting psychological distress. This also may relate to possible higher support offered to the adolescents who are unaccompanied minors and may be experiencing higher stress than those living with a biological parent or family. Further exploration of this is also needed.

In terms of seeking assistance, people seeking asylum often face multiple barriers that impede general health care access and experience difficulties navigating health services, including mental health (Hadgkiss and Renzaho, 2014)[17]. There are enormous mental health service provision gaps for adolescents seeking asylum, particularly with linguistic, social, historical, and cultural factors impeding service access (Correa-Velez et al., 2005).[8] There is further imperative to reduce contributors to asylum seeker and refugee adolescent mental stress (such as being detained in centres (Robjant et al., 2009)). [40]There is also a place to examine in more detail the outcomes for adolescents that result from their stress, for example behavioural problems and early school drop-out. School is an ideal setting to provide interventions for adolescent refugee and asylum seeking youth, with many strategies demonstrating a positive impact (Tyrer and Fazel, 2014).[50] Providing information for parents, schools and other service providers in identifying stress and understanding the outcomes of this stress is important. Exploration of culturally appropriate service availability for young asylum seekers is likewise needed.

Presently, the negative publicity and public sentiment towards people seeking asylum (Haslam and Pedersen, 2007[18]; Pedersen et al., 2005[36]; Markus A, 2014)[29] is profound. This is particularly pertinent given the Australian Government's recent labelling of those arriving by boat without a visa as 'illegal maritime arrivals'. The Government's assertion that they are 'committed to not providing permanent protection visas to people who arrive illegally' (Department of Immigration and Border Protection Australian Government, 2015) [9]may further reinforce this negative sentiment. It is important to note however, that many of these people are indeed ultimately granted refugee status (90% of those arriving by boat during 2011/12). Past experiences of trauma, the disadvantages associated relocation and lack of citizenship combined with Australian 'anti-asylum seeker' sentiment and societal discrimination produce a highly stressful environment for adolescents who are

seeking asylum. Addressing the mental stress of highly vulnerable adolescents who are seeking asylum is imperative.

Limitations

Interpretation and generalisability of these study results are limited by its small sample and the use of purposeful sampling. The small sample size may have reduced the power to detect significant associations. School connectedness measures have been inconsistently used in prior research (Appleton et al., 2006),[2] and in the absence of a validated tool (Karcher et al., 2008),[20] the California Healthy Kids Survey school connectedness (WestEd for the California Department of Education, 2011)[53] survey was selected. Language proficiency or cultural factors may have affected comprehension of the questions, although teacher assistance was provided as necessary.

Conclusion

This pilot study indicates that post-traumatic stress and psychological distress are health concerns warranting further investigation in community-living adolescents who are seeking asylum in Australia. Larger and longitudinal research as well screening and subsequent clinical assessment within these populations is needed. The examination of the immediate and long term impact of this stress is important, as is the development of evidence-based, culturally appropriate mental health interventions for children and adolescents who are seeking asylum.

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