
Protective Factors Contributing to Wellbeing Among Refugee Youth in Australia

Meryan Tozer, Nigar G. Khawaja and Robert Schweitzer

School of Psychology and Counselling, Faculty of Health, Queensland University of Technology, Brisbane, Australia

The present study examined protective factors associated with the wellbeing of 93 youth from a refugee background resettled in Brisbane, Australia. Wellbeing was defined as an absence of psychological distress and the presence of subjective wellbeing. Students at Milpera State High School, a special English language school, completed a battery of questionnaires. Hierarchical multiple regression analyses examined the relationship between protective factors and wellbeing, while controlling for sociodemographic characteristics. The results indicated that higher levels of school connectedness and acculturation were significantly associated with lower levels of psychological distress. Further, higher levels of school connectedness, acculturation and resilience, in addition to having a permanent visa, were significantly associated with higher levels of subjective wellbeing. Notably, 55% of the variance in subjective wellbeing was explained jointly by these factors. School connectedness, acculturation, resilience, and visa certainty were instrumental in enhancing aspects of wellbeing in the present sample of students from a refugee background. Implications for refugee-related policy and strategies in schools, mental health services, and at broader governmental levels are discussed.

■ **Keywords:** refugee, youth, wellbeing, protective factors, social support, resilience, acculturation

Minors constitute a marked proportion of all refugee entrants to Australia, with approximately 39% of offshore visas in 2013–14 and 15% of onshore visas in 2012–13 granted to refugees aged below 18 years (Department of Immigration and Border Protection, 2014). The majority of studies on minors from refugee backgrounds have found that they experience elevated levels of psychopathology, particularly depression, anxiety, and post-traumatic stress disorder (PTSD; de Anstiss, Ziaian, Procter, Warland, & Baghurst, 2009; Ehntholt & Yule, 2006). However, there has also been evidence of positive adaptation and development. High levels

ADDRESS FOR CORRESPONDENCE: Associate Professor Nigar Gohar Khawaja, Queensland University of Technology, Rm 525, O Block, B Wing, Ring Road, Kelvin Grove Qld 4059. Australia. Email: n.khawaja@qut.edu.au

of functioning, adjustment, and coping have been observed in many young refugees (e.g., Arnetz, Rofa, Arnetz, Ventimiglia, & Jamil, 2013), and longitudinal research with refugee youth has generally shown a considerable decrease in the prevalence of psychopathology over time (Almqvist & Broberg, 1999; Sack, Him, & Dickason, 1999; Steel, Silove, Phan, & Bauman, 2002). As such, understanding the factors that might promote recovery, adjustment, and coping, and thereby provide conditions for greater wellbeing among refugee youth — so-called ‘protective factors’ — is an area worthy of research attention.

Wellbeing in Refugee Youth

The majority of research in the refugee field has been directed towards understanding wellbeing by measuring psychopathology, and positive and subjective dimensions of wellbeing have been investigated significantly less. This reflects a traditional prioritisation in psychology research of a deficit-based mental health model over one based on positive psychological functioning (Keyes, 2007; Ryff & Keyes, 1995). There is emerging evidence that, rather than being on the same continuum, positive wellbeing is located on a separate dimension to mental illness, and separate or additional conditions are therefore considered necessary for an individual to flourish (Keyes, 2002, 2007). These conditions are considered to encompass subjective aspects, such as happiness, positive affect, and satisfaction with life (e.g., Diener, 1984; Lyubomirsky & Lepper, 1999), and positive psychological aspects, such as autonomy, personal development, self-acceptance, and life purpose (e.g., Ryff, 1989; Waterman, 1993). It was considered important to explore multiple dimensions of young refugees’ wellbeing in the current study, and wellbeing is therefore measured on two separate dimensions; first, as an absence of psychological distress; and second, as the presence of positive and subjective wellbeing aspects. It should be noted that these constructs are influenced by Western notions of wellbeing; operationalisations that attempt to assess wellbeing from the cultural standpoints of the study participants would be more appropriate but are outside the scope of this study. While there is some understanding of both the socio-demographic and psychosocial factors that protect against psychological distress among refugee youth, considerably less is known about the conditions that may account for positive wellbeing; understanding factors that influence positive wellbeing, in addition to psychopathology, is therefore a focus of this study.

Socio-Demographic Protective Factors

Socio-demographic variables that may act as protective factors among refugee youth include gender, age, education level, time passed since the trauma, and visa type (Fazel, Reed, Panter-Brick, & Stein, 2012; Reed, Fazel, Jones, Panter-Brick, & Stein, 2012). There is an emerging base of evidence, for example, that preadolescent and younger adolescent refugee children may experience fewer depressive symptoms than their older counterparts (Hasanović, Sinanović, & Pavlović, 2005). Similarly, girls appear to have a higher prevalence of internalising disorders, such as depression, anxiety, and loneliness (Bean, Eurelings-Bontekoe, & Spinhoven, 2007), whereas boys tend to display more externalising disorders, such as disruptive behaviours and oppositional trends (Mels, Derluyn, Broekaert, & Rosseel, 2010). Gender may therefore predispose refugee youth to encounter their challenges in

different ways. Higher levels of education achievement may prevent refugees from securing a job and can predict higher levels of psychopathology (Slodnjak, Kos, & Yule, 2002). An increase in the time since trauma appears to correlate with a decrease in symptomatology (Almqvist & Broberg, 1999). There is also significant evidence that undetermined refugee status is associated with higher levels of psychological distress, including depression and PTSD (Heptinstall, Sethna, & Taylor, 2004; Steel et al., 2011). Conversely, the efficient resolution of asylum claims has been found to reduce distress in children from refugee backgrounds (Heptinstall et al., 2004).

Psychosocial Protective Factors

Psychosocial factors that promote wellbeing may be grouped as individual-level, family and community-level, and society-level factors. Examples of individual-level factors are personal resilience, the degree of acculturation into the host society's culture, and faith in a religion or spirituality (Fazel et al., 2012; Montgomery, 2010; Reed et al., 2012). Family and community-level factors include family health and functioning, social support from peers and community members, and a sense of school connectedness (Fazel et al., 2012; Porter & Haslam, 2005; Reed et al., 2012). Access to health care and education, and the efficiency with which immigration processes are resolved are examples of factors at the societal level (Fazel et al., 2012; Reed et al., 2012; Montgomery, 2010). The present study was concerned with examining the contribution of certain psychosocial factors on both psychopathology and positive wellbeing among refugee youth, while controlling for the effect of socio-demographic variables. The main focus was on factors that can be fostered and influenced within a school environment, and therefore school connectedness, acculturation, and resilience were chosen. The socio-demographic variables considered most applicable to the participant cohort and were therefore controlled for were age, gender, length of stay in Australia, years of schooling, and visa type.

School connectedness. School connectedness can be described as 'the extent to which students feel personally accepted, respected, included, and supported by others in the school and classroom' (Goodenow, 1993, p. 81). Clear links between school connectedness and higher academic outcomes (e.g., Maurizi, Ceballo, Epstein-Ngo, & Cortina, 2013), improved self-esteem (e.g., Osterman, 2000), and lower levels of depression and anxiety (Shochet, Dadds, Ham, & Montague, 2006) have been identified in many cohorts. In one study, school connectedness accounted for between 38% and 55% of the covariance with depression and between 9% and 16% of that with anxiety (Shochet et al., 2006). As schools are one of the first and most influential systems that young refugees come into contact with after resettlement, it can be expected that school connectedness plays an important role in the wellbeing of displaced youth. (Kia-Keating & Ellis, 2007). In a study of Somali adolescents resettled in the United States, a greater sense of school connectedness was associated with reduced depression and increased self-efficacy, regardless of the level of past exposure to hardship (Kia-Keating & Ellis, 2007). Other studies have found that, among student refugees, an increased sense of school belonging protected against depression (Rousseau, Drapeau, & Platt, 2004) and anxiety

(Sujoldzić Peternel, Kulenović, & Terzić, 2006), and was positively linked to self-esteem (Sujoldzić et al., 2006).

Acculturation. Acculturation is a process of cultural and psychological change that involves integrating ideas, beliefs, values, and behaviours from one's home culture into life in a newly adopted culture (Berry, 2005). The acculturation strategy of integration — retaining some aspects of the original culture and adopting dimensions of the new culture — tends to lead to the most effective psychological adjustment across diverse population samples (Sam & Berry, 2010; e.g., Kovacev & Shute, 2004). Alternatively, either retaining the individual's own culture or assimilating entirely to the values of the host society is not predictive of psychosocial adjustment among young refugees (Kovacev & Shute, 2004). Problems with the process of adopting, modifying, and relinquishing cultural values can lead to acculturative stress, which is an important risk factor for psychological distress (Lincoln, Lazarevic, White, & Ellis, 2016). Acculturative stress may be exacerbated by factors in the host society, including adverse asylum processes and discrimination (Brough, Gorman, Ramirez, & Westoby, 2003; Phillimore, 2011), and individual-level variables, such as lack of resilience, low socioeconomic status, and poor proficiency in the host country's language (Brough et al., 2003; Phillimore, 2011).

Resilience. Resilience is defined as a modifiable dispositional capacity for appraising adversity positively that confers resistance against the development of mental illness (Arnetz et al., 2013; Edward & Warelow, 2005). Few studies of resilience among refugees have directly measured the protective nature of dispositional resilience. An exception is a study by Arnetz et al. (2013), who found that resilience was a significant inverse predictor of general psychological distress, but not of PTSD symptoms, among Iraqi refugees in the United States (Arnetz et al., 2013). In addition, related and possibly overlapping constructs, such as coping style and a sense of control (Hooberman, Rosenfeld, Rasmussen, & Keller, 2010), may ameliorate wellbeing among refugees.

The Present Study

Setting

The present study was undertaken at Milpera State High School (MSHS) in Brisbane. The school offers focused English language education and other core subjects to prepare newly arrived CALD migrants and refugees for entry to mainstream education. The majority of students attend the school for between 3 and 12 months. At the time of the study, there were over 24 nationalities represented in total. In addition to language tuition, the school assists students with the transition to living in Australia through two-way cultural education programs and instrumental support. Those students from refugee backgrounds who are identified as in need of therapeutic support can also access school-based intervention programs that use music and art therapy techniques.

Research Aims and Hypotheses

The aim of the present study was to explore the importance of psychosocial variables as contributors to two main constructs of wellbeing — an absence of psy-

chopathology and a presence of positive wellbeing — in a culturally diverse sample of refugee children and adolescents. There were two hypotheses. First, it was hypothesised that higher levels of school connectedness, acculturation, and resilience would predict lower levels of depression and anxiety. Second, it was hypothesised that higher levels of school connectedness, acculturation, and resilience would be associated with higher levels of positive wellbeing.

Method

Participants

The sample consisted of 93 refugee students. There were 50 females (54% of participants) and 43 males (46% of participants). Overall, the mean age of participants was 15.46 ($SD = 1.55$) years (range = 12–18). Sixty-one percent of participants were on permanent visas and the remaining 39% had been granted bridging or temporary visas. Participants' average length of stay in Australia was 10.24 months ($SD = 5.24$; range = 0–36). Twenty-four different birth countries and 32 different language groups were represented in the sample, the largest cohort being from Iran (22.6%). Other birth countries accounted for between 1.1% and 10.8% of the sample. Ninety-two percent of participants stated that they had a religion. Participants were from a diverse range of religions and denominations.

Predictor Measures

School connectedness. School connectedness was assessed through the Psychological Sense of School Membership (PSSM; Goodenow, 1993). The PSSM is an 18-item self-report questionnaire that measures a student's sense of school belonging through a 5-point Likert scale ranging from 1 (*not at all true*) to 5 (*completely true*). Higher scores identify participants as more connected to their school. Test–retest reliability of the scale was good ($r = .88$) and internal consistency was adequate, with Cronbach's alphas ranging from .77 to .80 (Goodenow, 1993). PSSM scores correlate significantly with social standing and student effort as rated by teachers, and with student-reported motivation and grades (Goodenow, 1993).

Acculturation. Acculturation was measured through the acculturation subscale of the Adult Acculturation and Resiliency Scale (AARS; Khawaja, Moiscuc, & Ramirez, 2014). The AARS is a 27-item scale with a stable three-factor structure of resiliency, acculturation, and spirituality. It aims to measure the positive development of adaptation and resilience (Khawaja et al., 2014). Acculturation, which is perceived within the AARS as the successful management of the new and original culture, is tested through 11 items. Psychometric properties were assessed using a culturally and linguistically diverse (CALD) community sample. Internal consistency ($\alpha = .83$) and test–retest reliability ($r = .65$) of the acculturation factor were satisfactory (Khawaja et al., 2014). For the present study, scale items were minimally reworded to be more suitable for young participants. The Likert-scale range was reduced to three options: 1 (*not at all*), 2 (*a little*) and 3 (*a lot*). Higher scores indicated higher levels of acculturation.

Resilience. Resilience was tested through 8 items from the 14-item resilience subscale of the AARS (Khawaja et al., 2014) in combination with 2 items from the

Resilience Questionnaire for Middle-Adolescents in Township Schools (R-MATS; Mampane, 2012). The Likert-scale range was limited to three options, from 1 (*not at all*) to 3 (*a lot*). Higher scores indicated higher levels of resilience.

Resilience is perceived within the AARS as an individual's ability to effectively cope with unfavourable situations by drawing on interpersonal and intrapersonal strengths (Khawaja et al., 2014). On the sample of CALD community members described above, the resilience subscale of the AARS was demonstrated to have adequate internal consistency ($\alpha = .80$) and test-retest reliability ($r = .89$).

Items 12 and 19 from the R-MATS were added to the resilience scale to investigate an additional construct: participants' perseverance in the face of adversity. The R-MATS has a stable four-factor structure of confidence and internal locus of control, social support, toughness and commitment, and achievement orientation (Mampane, 2012). For the present study, two items from the toughness and commitment factor were used. Exploratory analysis has shown the R-MATS to be internally consistent, with a Cronbach's alpha of 0.82 (Mampane, 2012).

Outcome Measures

Depression and anxiety. Depression and anxiety were tested via the two subscales of a brief 25-item version of the Hopkins Symptom Checklist (HSCL), which was specifically adapted for use with refugee populations (Mollica, Wyshak, de Marnette, Khuon, & Lavelle, 1987). The psychometric properties of the HSCL-25 are robust (Hollifield et al., 2002). In refugee samples, the English version of the HSCL-25 was found to have good reliability ($\alpha = .86$ for anxiety; $\alpha = .85$ for depression) and adequate item-total correlations ($r = .41-.67$ for anxiety; $r = .30-.61$ for depression; Kleijn, Hovens, & Rodenburg, 2001). For use in the present study, some items of the HSCL-25 were reworded slightly. For example, 'Feel tense or keyed up' was changed to 'Feel tense'. The original four categories of response (*not at all*, *a little*, *quite a bit* and *extremely*) were retained, with higher scores indicating higher levels of symptomatology.

Positive wellbeing. Positive wellbeing was assessed via the Stirling Children's Wellbeing Scale (SCWBS; Liddle & Carter, n.d.), which measures emotional and psychological wellbeing in children aged from 8 to 15 years. Internal consistency ($\alpha = .83$) and test-retest reliability ($r = .75$) of the scale are adequate (Liddle & Carter, n.d.). The scale's construct validity has been demonstrated through strong significant correlations between the SCWBS and both the Warwick-Edinburgh Mental Wellbeing Scale and the DuBois Self-Esteem Scale. For the present study, the Likert-scale range was limited to three levels, from 1 (*not at all*) to 3 (*a lot*), with higher scores representing higher levels of positive wellbeing.

Procedure

The current study formed part of a larger project at MSHS investigating refugee and migrant youth experiences. Ethics and health and safety clearances were obtained from the university and the respective education department. Information about the study and consent forms were disseminated to prospective participants by the school's guidance officer. Parent's and guardian's consent was required for students under 18 years. Before initiating test administration, the research team participated

in student classes over a 4-week period to establish rapport and familiarise students to their presence at the school.

The students who had consented to the study were administered the battery in one to two individual sessions of approximately 45 minutes at MSHS. Data pertaining to visa type and date of arrival was obtained from school enrolment records and verified with the participant during the interview. All questions were read in English by the researcher. Telephone interpreters were engaged to assist with the data collection using the participant's preferred language. At the completion of the interview, participants were debriefed and thanked for their involvement.

Results

Preliminary Analyses

A sample size of 91 young people was calculated as being necessary for a power of .80; based on an expected medium effect size of approximately .15 and using a significance criterion of .05 (Cohen, 1992). The data were screened for accuracy and the internal consistency of the scales and subscales was examined. Cronbach's alphas of the school connectedness, acculturation, resilience, and positive wellbeing scales were $\alpha = .87$, $\alpha = .75$, $\alpha = .85$, and $\alpha = .93$ respectively. Cronbach's alphas of the HSCL depression and anxiety subscales were $\alpha = .86$ and $\alpha = .78$ respectively.

Bivariate correlation analyses, as presented in Table 1, revealed that all psychosocial variables (school connectedness, acculturation, and resilience) were significantly negatively correlated with depressive and anxious symptoms. A greater length of stay in Australia and fewer years of schooling prior to arrival in Australia were significantly associated with higher levels of depression. All psychosocial variables were significantly positively correlated with positive wellbeing. Additionally, having a permanent visa was significantly related to higher levels of wellbeing.

Multiple Regression Analyses

Hierarchical multiple regression analyses (MRAs) were performed to estimate the proportion of variance in wellbeing that can be accounted for by school connectedness, resilience, and acculturation, while controlling for the sociodemographic factors of gender, age, length of stay, years of schooling, and visa type. For each indicator of wellbeing (depression, anxiety, and positive wellbeing) a separate MRA was conducted to test the hypothesis that the protective factors at the focus of this study influence the wellbeing of young refugees. In each MRA, the sociodemographic variables were entered on step 1, and the psychosocial variables were entered together on step 2. Relevant assumptions were first tested and it was revealed that there were significant departures from normality in the sample distributions for all predictor and outcome variables. Bootstrapping procedures using sampling distributions of 1,000 were therefore used in the MRAs, hence bootstrapped values for the confidence intervals of unstandardised coefficients are reported. Additionally, there were departures from linearity and homoscedasticity of residuals. These assumptions are discussed further in relation to their respective outcome variables. Other assumptions were met, and testing indicated that outliers did not exert an undue influence on results.

TABLE 1

Pearson's Correlations of Depression, Anxiety and Positive Wellbeing

	Gender	Age	Length of stay	Years of schooling	Visa type	School connectedness	Acculturation	Resilience	Depression	Anxiety
Age	-0.09									
Length of stay	-0.25*	0.19*								
Years of schooling	0.10	0.19	-0.01							
Visa type	-0.08	0.02	0.27*	0.11						
School connectedness	0.09	-0.20	-0.30**	0.04	-0.18					
acculturation	0.21*	0.20	0.40**	0.09	-0.28*	0.48**				
Resilience	-0.30	0.70	-0.20	0.18	-0.19	0.59**	0.54**			
Depression	0.31	0.11	0.22*	-0.24*	0.10	-0.48**	-0.54**	-0.54**		
Anxiety	0.02	-0.01	0.14	-0.14	0.12	-0.46**	-0.57**	-0.51**	0.73**	
Positive wellbeing	0.00	0.12	-0.23*	0.20	-0.37**	0.62**	0.65**	0.75**	-0.67**	-0.63**

Note: *N* = 93.

p* < .05, 1-tailed. *p* < .01, 1-tailed.

TABLE 2

Unstandardised (B) and Standardised (β) Regression Coefficients and Squared Semi-Partial Correlations (sr^2) for Each Predictor in a Hierarchical Regression Model Predicting Depression Among Refugee Youth

Variable	B [95% CI]	β	sr^2
Step 1			
Gender	-0.01 [-0.34, 0.28]	-0.01	.00
Age	0.02 [-0.07, 0.12]	0.06	.00
Length of stay	0.02 [-0.01, 0.04]	0.19	.03
Years of schooling	-0.05 [-0.10, 0.02]	-0.26	.06
Visa type	0.15 [-0.14, 0.46]	0.15	.02
Step 2			
Gender	0.05 [-0.16, 0.27]	0.05	.00
Age	0.03 [-0.04, 0.13]	0.09	.01
Length of stay	-0.00 [-0.34, 0.03]	-0.02	.00
Years of schooling	-0.03 [-0.09, 0.02]	-0.19	.03
Visa type	-0.01 [-0.25, 0.22]	-0.01	.00
School connectedness	-0.24 [-0.54, 0.11]*	-0.28	.04
Acculturation	-0.55 [-1.09, -0.08]*	-0.31	.05
Resilience	-0.22 [-0.60, 0.16]	-0.20	.02

Note: $N = 93$. CI = confidence interval.

* $p < .05$; ** $p < .01$.

Depression. As visual inspection of residual scatterplots revealed a marginal breach of homoscedasticity, it was controlled for by performing MRA through PROCESS using heteroscedastic consistent standard errors. Overall, the behaviour of variables and their relationships with one another did not differ markedly between the original multiple regression and PROCESS analyses, and therefore results of the original MRA are presented.

On step 1 of the hierarchical MRA, age, gender, length of stay, years of schooling, and visa type accounted for a non-significant 14.2% of the variance in depression, $R^2 = .14$, $F(5, 50) = 1.65$, $p = .163$. On step 2, school connectedness, acculturation, and resilience were added to the model and accounted for an additional 33.1% of the variance in depression, $R^2_{\text{change}} = .33$, $F_{\text{change}}(3, 47) = 9.83$, $p < .001$. In combination, all predictor variables explained 47.3% of the variance in depression, $R^2 = .47$, adjusted $R^2 = .38$, $F(8, 47) = 5.27$, $p < .001$. According to Cohen's (1988) conventions, this represents a large effect. Unstandardised regression coefficients (B) with bootstrapped confidence intervals, standardised regression coefficients (β), and squared semi-partial correlations (sr^2) for each predictor in the regression model are presented in Table 2. Table 2 shows that school connectedness and acculturation were significant predictors of depression ($sr^2 = .04$ and $.05$ respectively) in the final regression model after accounting for the effects of sociodemographic factors. These represent small effect sizes according to Cohen (1998).

Anxiety. As visual inspection of residual scatterplots revealed that the homoscedasticity assumption had been breached, MRA was performed through PROCESS

TABLE 3

Unstandardised (B) and Standardised (β) Regression Coefficients and Squared Semi-Partial Correlations (sr^2) for Each Predictor in a Hierarchical Regression Model Predicting Anxiety Among Refugee Youth

Variable	B [95% CI]	β	sr^2
Step 1			
Gender	0.02 [-0.34, 0.31]	0.02	.00
Age	-0.04 [-0.14, 0.04]	-0.11	.01
Length of stay	0.01 [-0.02, 0.04]	0.14	.02
Years of schooling	-0.03 [-0.10, 0.03]	-0.19	.03
Visa type	0.16 [-0.15, 0.52]	0.16	.02
Step 2			
Gender	0.10 [-0.14, 0.33]	0.10	.01
Age	-0.02 [-0.10, 0.08]	-0.05	.00
Length of stay	-0.01 [-0.04, 0.02]	-0.07	.00
Years of schooling	-0.02 [-0.08, 0.03]	-0.12	.01
Visa type	-0.00 [-0.26, 0.29]	-0.00	.00
School connectedness	-0.12 [-0.46, 0.19]	-0.13	.01
Acculturation	-0.76 [-1.47, -0.14]**	-0.42	.09
Resilience	-0.23 [-0.68, 0.18]	-0.20	.02

Note: $N = 93$. CI = confidence interval.

* $p < .05$; ** $p < .01$.

using heteroscedastic consistent standard errors. As coefficient values of the variables and the relationships between variables did not differ markedly between the original multiple regression and PROCESS analyses, results of the original MRA are presented.

On step 1 of the hierarchical MRA, gender, age, length of stay, years of schooling, and visa type accounted for a non-significant 8.6% of the variance in anxiety scores, $R^2 = .09$, $F(5, 50) = 0.94$, $p = .461$. On step 2, 31.4% of the variance in anxiety was accounted for by the addition of school connectedness, acculturation, and resilience, $R^2_{\text{change}} = .31$, $F_{\text{change}}(3, 47) = 8.22$, $p < .001$. Together, all predictor variables explained 40.1% of the variance in anxiety, $R^2 = .40$, adjusted $R^2 = .30$, $F(8, 47) = 3.93$, $p < .001$. According to Cohen's (1988) conventions, an effect of this size can be considered 'large'. Table 3 presents unstandardised regression coefficients (B) with bootstrapped confidence intervals, standardised regression coefficients (β), and squared semi-partial correlations (sr^2) for each predictor in the regression model. As can be seen from Table 3, acculturation was a significant predictor of anxiety in the final regression model ($sr^2 = .09$), representing a medium effect by Cohen's (1988) conventions.

Positive wellbeing. Results of the initial hierarchical MRA showed that, on step 1, age, gender, length of stay, years of schooling, and visa type accounted for a significant 23.8% of the variance in positive wellbeing, $R^2 = .24$, $F(5, 50) = 3.13$, $p = .016$. When school connectedness, acculturation, and resilience were added to the regression equation on step 2, those variables together accounted for

TABLE 4

Unstandardised (B) and Standardised (β) Regression Coefficients and Squared Semi-Partial Correlations (sr^2) for Each Predictor in a Hierarchical Regression Model Predicting Positive Sense of Wellbeing Among Refugee Youth

Variable	B [95% CI]	β	sr^2
Step 1			
Gender	0.02 [-0.22, 0.24]	0.02	.00
Age	0.05 [-0.03, 0.13]	0.15	.02
Length of stay	-0.02 [-0.04, 0.01]	-0.19	.03
Years of schooling	0.03 [-0.01, 0.61]	0.20	.04
Visa type	-0.30 [-0.52, -0.08]**	-0.37	.13
Step 2			
Gender	-0.02 [-0.14, 0.10]	-0.02	.00
Age	0.04 [-0.00, 0.08]	0.12	.01
Length of stay	0.00 [-0.01, 0.02]	0.04	.00
Years of schooling	0.01 [-0.01, 0.03]	0.09	.01
Visa type	-0.14 [-0.25, -0.14]*	-0.17	.03
School connectedness	0.30 [-0.17, 0.53]**	0.43	.10
Acculturation	0.30 [-0.01, 0.57]*	0.21	.02
Resilience	0.31 [0.11, 0.51]**	0.34	.06

Note: $N = 93$. CI = confidence interval.

* $p < .05$. ** $p < .01$.

an additional 55% of the variance in positive wellbeing, $R^2_{\text{change}} = .55$, $F_{\text{change}}(3, 47) = 40.79$, $p < .001$. In combination, all predictor variables explained 78.9% of the variance in positive wellbeing, $R^2 = .79$, adjusted $R^2 = .75$, $F(8, 47) = 21.92$, $p < .001$. By Cohen's (1988) conventions, this represents a large effect. Unstandardised regression coefficients (B) with bootstrapped confidence intervals, standardised regression coefficients (β), and squared semi-partial correlations (sr^2) for each predictor in the regression model are presented in Table 4. Table 4 shows that school connectedness ($sr^2 = .10$), acculturation ($sr^2 = .02$), and resilience ($sr^2 = .06$) emerged as significant psychosocial predictors of positive wellbeing. In addition, visa type was a sociodemographic variable that presented as a significant predictor of positive wellbeing ($sr^2 = .03$). These effects are of small to medium magnitudes (Cohen, 1988).

Discussion

The purpose of the study was to investigate the relationship between psychosocial protective factors and multiple dimensions of wellbeing while controlling for socio-demographic variables in a culturally diverse sample of young refugees. The hypotheses were partially supported. School connectedness and acculturation were negatively associated with depression scores, while acculturation was negatively correlated with anxiety scores. Further, school connectedness, acculturation, and resilience were positively related with positive wellbeing and jointly accounted for a large effect. Visa type was the only sociodemographic variable that emerged as a

significant predictor in the analyses, with results indicating that having a permanent visa was associated with higher levels of positive wellbeing.

Wellbeing Reflected by an Absence of Psychological Distress

The finding of a significant relationship between higher levels of school connectedness and lower levels of depression is well supported in other research among refugee youth and in the general population (e.g., Kia-Keating & Ellis, 2007). The findings accord with Fazel and colleagues' (2012) proposition that schools are uniquely placed to undertake vital aspects of care for refugee children and have an important role in mitigating long-term negative psychological sequelae by enhancing resilient behaviours, facilitating the development of peer relationships, acting as a stable social support system, and assisting integration. One particular implication of these findings may be further support for the development of interventions within school settings, with the specific aim of helping children overcome difficulties arising from forced migration (e.g., Tyrer & Fazel, 2014).

The significant correlation between higher levels of acculturation and lower levels of both depression and anxiety extends on an emerging area of research that suggests that employing a particular acculturation strategy — integration — is associated with better psychological functioning. Few other studies have examined the relationship between integration and depressive and anxious pathology in particular, focusing instead on measures such as self-worth, social support, and loneliness (e.g., Kovacev & Shute, 2004). An exception is a recent study by Lincoln et al. (2016), which also found that, as compared to marginalised or separated refugee groups, lower depression levels were associated with an acculturative style that included participation in the host and original cultures.

It is particularly interesting that in the present study, acculturation was the only psychosocial variable to have a notable effect on anxiety scores, as this represents a previously unidentified relationship. The findings may be explained by the fact that successful acculturation resolves acculturative stress by reducing conflict between learning new aspects of the host culture and relinquishing aspects of the original culture (Berry, 2005). The results suggest that integration may be a form of acculturation that resolves acculturative stress and conflict effectively, as asserted by Berry (2005). Furthermore, the results suggest that better mental health outcomes for refugees will ensue from implementing strategies that minimise acculturative stress, such as by facilitating young refugees to develop peer and community networks (Tousignant et al., 1999), and have positive experiences of multiculturalism (Brough et al., 2003), and by developing programs that support young refugees to retain a balance between aspects of their home culture and dimensions of the new culture.

Positive Wellbeing

Psychosocial factors predicted a large proportion of the variance in positive wellbeing, with school connectedness and resilience being the strongest predictors. The outcomes regarding school connectedness in particular are supportive of prior research that found that refugee adolescents' greater sense of belonging, particularly perceptions of status and inclusion, were strongly associated with greater subjective wellbeing after the first 8 years of resettlement (Correa-Velez, Gifford, &

McMichael, 2015). Factors that promote positive wellbeing in refugees are an understudied area, and there is little other research with which to compare the findings of the present study. However, the results are consistent with what is known about the foundations of positive wellbeing in the general population, which include supportive parenting and friendship networks, positive life experiences, and intimate attachments (Dodge, Daly, Huyton, & Sanders, 2012).

There is growing interest in the conditions that allow individuals to flourish, given emerging support for the notion that while the majority may be free of mental illness, they may not necessarily enjoy good mental health (e.g., Keyes, 2002, 2007). Good mental health in the mainstream population is believed to be associated with a range of positive outcomes. For example, among youth, subjective wellbeing is believed to mitigate the negative effects of stressful life experiences, protect against the development of psychological and behavioural problems, and be correlated with physical health (Reed et al., 2012). The findings of the present study are therefore important, as they indicate that fostering a sense of school belonging and building personal resilience, in particular, may help to minimise psychological, behavioural, physical, and other stress-induced difficulties among young refugees.

It is notable that permanent visa status emerged as a significant sociodemographic predictor of wellbeing, accounting for a small proportion of the variance in the outcome. The findings are aligned with majority of existing research, which shows strong negative effects of insecure asylum status on the refugees on TPVs (a former visa class that conferred temporary refugee status on an ongoing basis and often for prolonged periods; Fazel et al., 2012; Reed et al., 2012). The population sample for the present study consisted of permanent refugees, as well as asylum seekers on temporary visa types, which differs to the former TPVs, so it is difficult to compare results of the present study with those that have preceded it. Despite this difference, the fact that permanent visa status accounted for a small proportion of the variance in wellbeing scores corroborates with existing evidence that being entitled to stay in the host country on a permanent basis is psychologically beneficial. This may be because permanent residency provides certainty and security (Fazel et al., 2012), and bestows additional rights and service access that minimise living difficulties (Nickerson, Steel, Bryant, Brooks, & Silove, 2011).

Research Limitations and Future Directions

There were several research limitations, and the findings should be taken with caution. The sample size was small, limiting statistical power to detect significant regression effects. It was also drawn from a specialised educational setting that aims to provide a tailored and supportive learning environment, which restricts generalisation of the findings to broader refugee populations. It is recommended that future studies use a larger and more random sampling procedure. Moreover, this field of research would benefit from a more longitudinal approach to assess the wellbeing of young refugees in multiple contexts and after a longer duration of stay in their new country. Although it was outside the scope of the present study, one of the authors is following participants through a longer-term project with the aim of understanding the young refugees' experiences over time, and particularly in a mainstream schooling context.

It was also outside the scope of the study to control for all demographic variables that may have accounted for differences in wellbeing states within the sample. Specifically, the data collection process did not include a reliable measure of English language level or assess other factors that may impact on refugee wellbeing, such as unaccompanied arrival or prior detention. Failing to control for these factors may have exerted an undue influence on results.

Amendments to data collection procedures to allow for cultural and language differences, and the fact that the project was based on largely Western constructs, need to be taken into account in the interpretation of results. In particular, the psychometric properties of the scales may have been altered by making CALD- and youth-friendly amendments. Additionally, the meaning of certain items may have been lost in translation as a result of administering questionnaires in an interview format through interpreters. Furthermore, culturally specific understandings or definitions were not reflected in the constructs; rather, the constructs were situated in Western-based epistemologies and measured using questionnaires developed largely with Western populations. Qualitative methodology would be an appropriate means through which to better understand concepts that have culturally specific or culturally influenced meanings. Hollifield and colleagues (2002) suggest that greater robustness in refugee-related research can be achieved through developing instruments within community populations using empirical approaches that combine both qualitative and quantitative methods. It is therefore also suggested that the present findings be further investigated through quantitative research that employs assessment instruments specifically developed or adapted for use with young refugees.

Implications

The present study has important implications for policy and practice in the fields of education, mental health, and broader refugee governance. First, these findings can be used to shape refugee education environments characterised by respect for cultural diversity, supportive staff-student relations, and healthy peer interactions, with a specific focus on acculturation and school connectedness strategies. Second, the findings can be used to guide the ongoing development of targeted mental health interventions for depression and anxiety that facilitate a sense of school belonging and integration in particular. Finally, at the broader governmental level, the findings should be used to develop policies aimed at strengthening protective factors to not only mitigate mental illness but also promote mental health.

Conclusion

In spite of the limitations, the study was the first of its kind to investigate correlates of positive wellbeing, and it extended existing research into factors promoting an absence of depression and anxiety in young refugees. The outcomes indicated, first, that school belongingness and acculturation, as manifested by integration, may be protective against depression and anxiety among young refugees. Second, the study found that being strongly connected to school, well acculturated and resilient are conditions that may promote a positive sense of wellbeing in young refugees.

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