
Evaluation of an Anxiety-prevention and Positive-coping Program (FRIENDS) for Children and Adolescents of Non-English-speaking Background

Paula M. Barrett, Robi Sonderegger, and Noleen L. Sonderegger
Griffith University

This study aimed to (a) appraise the efficacy of a well validated Anglo-Australian anxiety-prevention and stress-resiliency program (FRIENDS) for use with culturally diverse migrant groups residing in Australia, (b) examine the social validity of FRIENDS, and (c) obtain information from both participants and facilitators regarding how the program can best be modified for specific use with non-English-speaking background (NESB) clients. To test the efficacy of the intervention, pre- and post-intervention evaluation of internalising symptoms and coping ability were compared with waiting-list control groups (matched according to ethnic group, gender, and school level). One hundred and six primary and ninety-eight high school students differentiated by cultural origin (former-Yugoslavian, Chinese, and mixed-ethnic) and school level (primary and high school), completed standardised measures of internalising symptoms and were allocated to either an intervention ($n = 121$) or a waiting-list ($n = 83$) condition. Both groups were readministered the assessment package for comparison following a 10-week treatment or waiting period. Consistent with a recent pilot study, pre/post-assessment indicated that participants in the intervention condition exhibited lower anxiety and a more positive future outlook than waiting-list participants. Participating students reported to be highly satisfied with the intervention. Despite the overall success of FRIENDS, the program may be enhanced by culturally sensitive supplements so that the program is more applicable for use with NESB participants. Suggestions for treatment program modifications of FRIENDS are discussed.

The stress and anxiety that accompanies migration and cultural adjustment in children and adolescents has been widely documented in recent years (Barrett, Moore, & Sonderegger, 2000; Evans & Lee, 1998; Grunbaum, 1997). In addition to learning a new language and adjusting to new behaviours, migrants commonly experience grief at the loss of extended family members, friends, cultural traditions and prac-

tices, and basic cultural norms. Ethnically diverse parents are often pressured to undergo attitude change towards traditional beliefs concerning adolescent independence, sex-roles, marriage, and child-rearing practices (Storer, 1985). Because children and adolescents typically adapt to their host culture much more quickly than parents (who commonly maintain close ties with their culture of origin), inter-generational

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Address for correspondence: Dr Paula Barrett, School of Applied Psychology, Faculty of Health Science, Psychology Building Mt Gravatt, Griffith University, Nathan QLD 4111, Australia. Email: P.Barrett@mailbox.gu.edu.au

conflict and distress often results (Baptiste, 1990). With such multifaceted and compounded difficulties being paired with migration, it is not surprising that acculturative stress has been found to be a major cause of internalising problems (Berry, 1998).

Despite broad acknowledgment in the cross-cultural literature regarding the difficulties associated with migration, little is understood about the psychological adjustment of culturally diverse children and adolescents residing in Australia. A recent Australian study by Barrett, Sonderegger, and Sonderegger (in press) found former-Yugoslavian, Chinese, and mixed-ethnic migrant groups to vary in their experience of cultural adjustment, emotional distress, and coping ability. This study highlighted that culturally diverse groups have specific needs, strengths, and weaknesses. Accordingly, Sonderegger, Barrett, and Sonderegger (in press) argue that standardised psychosocial treatment programs may not address the specific needs of culturally diverse groups. While culturally sensitive psychological-practice recommendations have been proposed in the crosscultural literature (see Bird, 1996; Sonderegger et al., in press; Verhulst & Achenbach, 1995), ethnically sensitive treatment programs for migrant groups, or even empirical trials of existing interventions for use with non-English-speaking background (NESB) children and adolescents, are virtually nonexistent.

There is increasing data suggesting that psychosocial treatments and prevention programs are effective for reducing a broad range of internalising problems (anxiety and depression) and promoting emotional resiliency in children and adolescents (e.g., Barrett, Dadds, & Rapee, 1996; Kendall et al., 1997; Shortt, Barrett, & Fox, in press). However, it remains unclear whether it is suitable to apply therapeutic procedures developed for Anglo-Australians to NESB populations. To help ascertain the generalisability of well-standardised interventions, Barrett, Moore, et al. (2000) trialed a 10-week group-based cognitive-behavioural treatment program (FRIENDS; Barrett, Lowry-Webster, & Turner, 2000c, 2000d) with clinically anxious female refugees from former-Yugoslavia. Although the program appeared to be effective

in reducing clinical anxiety from pre- to post-intervention, the small sample size in this pilot study has limited the generalisability of their findings. The authors concluded that the efficacy of the intervention may have been enhanced by tailoring the program to the specific migration issues presented by the participants. The need to incorporate cultural and migration issues (e.g., adjustment difficulties) into examples and activities was highlighted.

In an attempt to gather empirical data on the cultural-adaptation experiences of young migrants to Australia, and determine how therapeutic techniques can be culturally modified to better meet the needs of Australia's multicultural population, the present study expands upon the work of Barrett, Moore, et al. (2000). Specifically, this study aims to (a) evaluate the efficacy of FRIENDS in reducing anxiety and building emotional resiliency in students of different school-age levels and diverse cultural groups, (b) examine the social validity of FRIENDS from the perspective of participants and mental health professionals, and (c) obtain information on how FRIENDS can best be modified for specific use with NESB migrants to Australia. It is expected that all participating cultural groups in both primary and high school will exhibit greater self-esteem, a reduction of internalising symptoms, greater coping ability, and a more positive future outlook from pre- to post-intervention, exceeding any change for the waiting-list condition. Although FRIENDS does not incorporate cultural and migration issues, it is expected that the program will be flexible enough to address some of the anxiety concerns associated with migration, and therefore be perceived by participants and independent health professionals as a socially valid program, achieving its intended goals.

Method

Participants

A total of 204 children and adolescents participated in this study (97 females, 107 males). The sample was comprised of former-Yugoslavian ($n = 75$), Chinese ($n = 100$), and mixed NESB students ($n = 29$) whose families migrated from Southeast Asia, Pacific Islands, Europe, Africa,

and the Middle East. Students were recruited from a total of 13 ESL (English as a second language) classes in four primary and two high schools located throughout the Brisbane and Gold Coast region of Southeast Queensland. Participants were grouped according to ethnic origin, and were allocated by school and ESL

class to either an intervention ($n = 121$) or waiting-list ($n = 83$) condition. Participants were between the ages of 7 and 19 years. Primary school children ($n = 106$) ranged in age from 7 to 13 years ($M = 10.45$ years) and high school students ($n = 98$) ranged in age from 11 to 19 years ($M = 14.55$ years). Treatment and waiting-list

TABLE 1
Demographic Variables for Participants in Each Ethnic Group

	Waiting list			Intervention		
	F-Yugosl	Chinese	M-ethnic	F-Yugosl	Chinese	M-ethnic
School level						
Primary	10	25	0	33	38	0
High	20	14	14	12	23	15
Gender						
Males	14	23	7	20	32	11
Females	16	16	7	25	29	4
Age						
<i>Primary school</i>						
Mean	9.00	10.60	N/A	10.03	11.11	N/A
SD	1.56	1.29	N/A	1.49	1.23	N/A
<i>High school</i>						
Mean	14.85	15.79	14.64	14.83	13.26	14.67
SD	12.08	1.53	2.50	1.03	1.10	2.26
Years of residence in Australia						
Mean	1.27	2.82	0.39	1.55	1.96	0.68
SD	1.54	2.25	0.41	1.01	1.89	0.41
Ethnic origin						
Bosnia	16			25		
Serbia	13			16		
Croatia	1			4		
Mainland China		5			8	
Hong Kong		13			10	
Taiwan		21			43	
Horn of Africa			4			7
Southeast Asia			3			4
Russia			1			1
Spain			1			0
Kosovo			1			1
Pacific Islands			2			2
Middle East			2			0

Note. F-Yugosl = Former-Yugoslavian; M-ethnic = Mixed ethnic background.

groups were matched for culture, age, and gender, and were grouped according to school level and cultural background. The length of time participants had been residing in Australia ranged from 2.5 months to 7.5 years ($M = 3.93$, $SD = 2.18$). Participant demographics are presented in Table 1.

Self-report Measures

An assessment package was created to examine levels of self-esteem, anxiety and trauma, coping ability, and future outlook. The inventories listed below were selected according to their cultural and age appropriateness.

Measures of self-esteem. The Self-Esteem Inventory (SEI; Coopersmith, 1981) and the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) have previously been found adequate for measuring self-concept and personal worth among culturally diverse primary and high school migrant students (see Barrett et al., in press). The 58-item SEI is suitable for administration with primary school children, assessing self-esteem across four factor-domains (general self, social self/peers, home/parents, and school/academic). Participants indicate whether items are *like me* or *unlike me*. Similar to Barrett et al., only social self/peers and school/academic subscales were included in this study so as to offset the high number of items included in the assessment package. These subscales yield a score range in each category from 0 to 8. Higher scores indicate higher self-esteem. The 10-item RSES is suitable for administration with high school students, measuring global feelings of self-worth and self-acceptance. Participants' answers range from *strongly agree* to *strongly disagree*. Higher scores equate to higher self-esteem. Both the SEI and the RSES are psychometrically sound (Coopersmith, 1967, 1989; Rosenberg, 1989).

Internalising symptoms. All participants were administered the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985) and the Trauma Symptom Checklist for Children (TSCL; Briere, 1996). The 37-item RCMAS is a revision of the Manifest Anxiety

Scale (Castaneda, McCandless, & Palermo, 1965) measuring anxiety-related symptoms across three factor-domains of general anxiety (physiological, worry/over-sensitivity, and social concerns/concentration). Participants respond to each of the items in a yes/no format. The 54-item TSCL assesses the trauma symptoms across six clinical scales (anxiety, anger, depression, posttraumatic stress, dissociation, and sexual concerns). The frequency of experienced symptoms in each subscale was measured (excluding sexual concerns), with answers ranging from *never* to *very often*. Both the RCMAS and TSCL are widely used in clinical research, exhibiting sound validity and reliability (Briere, 1996; Reynolds & Richmond, 1978, 1985), and have previously been employed in crosscultural investigations (see Barrett et al., in press; Dong, Yang, & Ollendick, 1994; Ginsburg & Silverman, 1996).

Coping ability. The 29-item Coping Scale for Children and Youth (CSCY; Brodzinsky et al., 1992) measures the coping style preference and ability across four subdomains: assistance seeking, behavioural avoidance, cognitive avoidance, and cognitive-behavioural problem solving. Participants indicate the frequency of employed coping strategies when trying to deal with specific problems. Answers range from *never* to *very often*. Higher scores represent greater coping ability. The CSCY has shown good reliability and validity (Brodzinsky et al., 1992) and has previously been found adequate for use with NESB students (see Barrett et al., in press).

Future outlook. The Kazdin (Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983) and Beck (Beck, Weissman, Lester, & Trexler, 1974) Hopelessness Scales (KHS and BHS respectively) were employed to measure pessimistic expectation of the future among primary and high school participants, respectively. The 17-item KHS is designed to measure hopelessness, defined as being negative future expectancies. Participants respond to each question as being either *true* or *false*. The scale is specifically designed for children, and is appropriate for use with primary school Grades 1 through 7. The BHS is a 20-item self-report inventory designed to measure pessimistic

expectations for older participants. Adolescents respond to each of the items in a *true* or *false* format. Hopeless-cognition scores are summed to yield a scaled score ranging from 0 to 20. Higher scores on both scales indicate a greater sense of hopelessness. Both scales have previously been used with culturally diverse communities (e.g., Tanaka, Sakamoto, Ono, Fujihara, & Kitamura, 1998; Vinas & Domenech, 1998) and are psychometrically valid (Steed, 2001; Kazdin, Rodgers, & Colbus, 1986).

Treatment Materials

The FRIENDS program (Barrett, Lowry-Webster, et al., 2000a, 2000b, 2000c, 2000d) is a peer-group early-intervention program for children and adolescents, which has been developed through extensive scientific research and clinical validation over the past 10 years (Barrett, 1998, 1999, in press; Barrett & Turner, in press; Shortt et al., in press). FRIENDS has a reputation as being a leading early-intervention and prevention program for negative emotion (anxiety and depression) that has been clinically validated in Australia, and has satisfied the federal government guidelines for evidence-based research through national and international research (for a detailed description of the program, refer to <http://www.australianacademicpress.com.au>). The FRIENDS program features a group leaders' manual that clearly explains activity objectives and administration instructions for each session. Children and adolescents work through individual workbooks detailing coping strategies and homework activities. The manuals permit flexible implementation to allow for cultural differences or specific anxiety-related concerns (e.g., adjustment problems, traumatic stress, peer acceptance). Barrett, Moore, et al. (2000) recently found preliminary evidence to suggest that FRIENDS is effective among culturally diverse participants in reducing anxiety and stress associated with migration.

The FRIENDS program consists of 10 structured 1-hour sessions, featuring parallel versions for primary school children (Barrett, Lowry-Webster, et al., 2000a) and high school adolescents (Barrett, Lowry-Webster, et al., 2000c). Group-leader manuals for both pro-

grams clearly describe the activities (and rationale) that facilitators need to implement in each session. Participants engage in group discussions, team activities, and individual activities featured in accompanying workbooks (Barrett, Lowry-Webster, et al., 2000b, 2000d). Mental health professionals who underwent standardised FRIENDS group-leader training conjointly facilitated the intervention groups in this study.

Treatment Integrity and Social Validity

All participants completed a Treatment Integrity Checklists (TIC) at the end of each session, and a Group Leader Integrity (GLIQ) and Social Validity Questionnaire (SVQ) at the conclusion of the program (see Barrett, Lowry-Webster, & Turner, 1999). The TIC and GLIQ asked participants to provide Likert ratings on how effective they perceived each activity to be, and how well they felt facilitators related to group participants, respectively. To ensure adherence to FRIENDS program manuals, treatment sessions were audiotaped. A clinical masters trained doctoral candidate, who was blind to the study, conducted an independent integrity check of treatment sessions, reviewing audiotapes at random from primary and high school sessions (equal to approximately 30% of an entire program). Ratings on the TIC revealed 95% concordance between session and manual content for primary schools, and 93% for high schools. Ratings on the GLIQ found no significant differences between group facilitators.

At completion of the treatment, students completed the SVQ, indicating their level of satisfaction with the FRIENDS program. Participants were asked to rate how much they enjoyed and learned from the program (*a lot, some, a little, nothing at all*), how often they used the ideas (skills) that they learned (*all the time, some of the time, not very often, not at all*), and which skills from the FRIENDS program they found most useful. Participants were also encouraged to provide comments (negative or positive) to help improve the program. An independent clinical masters candidate further conducted interviews with all group facilitators and 15 representative FRIENDS participants from all cultural groups and school levels

(selected at random) both during and following completion of the program, to determine which aspects of the program would benefit from culturally sensitive modifications.

Procedural Variables

Assessment packages (differentiated by primary and high school) were administered to both waiting-list and intervention participants using the same administration procedure for all school and cultural groups. Although participants could read and write basic English, group assessments were conducted verbally in ESL classrooms, providing both an English and native cultural language (Mandarin, Cantonese, and former-Yugoslavian) interpretation of each question by trained bilingual mental health professionals. Mixed-ethnic participants were administered the assessment package in English only. Questionnaires were administered over an average of two 1-hour sessions at pre- and post-intervention or waiting period.

A total of 10 intervention groups were run in six different schools. All participating schools were recruited from analogous sociodemographic regions. Both primary and high schools were of similar size, and were all operating under the Queensland state education system. Four high school treatment groups (using FRIENDS for Youth; Barrett, Lowry-Webster, et al., 2000c, 2000d) were run ($n = 50$), comprising one former-Yugoslavian group ($n = 12$), two Chinese groups ($n = 22$), and one mixed-ethnic group ($n = 15$). Six primary school treatment groups (using FRIENDS for Children; Barrett, Lowry-Webster, et al., 2000a, 2000b) were run ($n = 71$), comprising three former-Yugoslavian groups ($n = 28$) and three Chinese groups ($n = 37$). Each FRIENDS group featured between 6 and 17 students.

Results

Pre-condition Assessment

MANOVA, t tests, and chi-square tests were performed to ensure that waiting-list and intervention groups were comparable. While no significant differences were found for any sociodemographic variables, two between-

group differences on pre-condition self-report measures were revealed. A significant difference was found for the social subscale of the SEI, $t(102) = -2.68$, $p < .01$, with waiting-list participants ($M = 5.74$, $SD = 4.87$) reporting higher social self/peers esteem than those allocated to the intervention condition ($M = 4.87$, $SD = 1.63$). Waiting-list participants also scored significantly higher than intervention students on the TSCL, $F(1, 93) = 2.470$, $p < .001$. Tests of between-subjects effects revealed this difference to be significant across all TSCL subscales (see Table 2). No other significant differences were found between waiting-list and intervention participants on pre-condition assessment.

Post-condition Assessment

Self-esteem. The 2 (Condition) x 2 (Time) x 2 (Subscale) mixed factorial MANOVA performed for the SEI revealed a significant main effect for condition on the school subscale, $F(1, 82) = 10.443$, $p < .01$. t tests demonstrated a significant difference between waiting-list and intervention groups on the school subscale at post-assessment, $t(84) = 3.58$, $p < .001$, but not at pre-assessment. Inspection of descriptive statistics shows school self-esteem among intervention participants increased from pre- ($M = 5.69$, $SD = 1.72$) to post-intervention ($M = 6.03$, $SD = 1.94$), and school self-esteem among waiting-list participants decreased from pre- ($M = 4.95$, $SD = 1.91$) to post-wait ($M = 4.41$, $SD = 1.62$). A mixed factorial ANOVA performed for the RSES revealed no significant time or condition differences among high school students.

Internalising symptoms. A 2 (Condition) x 2 (Time) mixed factorial ANOVA was performed for the RCMAS, revealing a significant main effect for condition, $F(1, 147) = 5.906$, $p < .01$, and time, $F(1, 147) = 70.730$, $p < .001$, and a significant Condition x Time interaction, $F(1, 147) = 8.161$, $p < .001$. Simple effect analysis demonstrated the condition interaction to exist at post-condition assessment, $F(1, 147) = 15.650$, $p < .001$. Follow-up t tests indicated a significant reduction in severity ratings in the intervention condition from pre- ($M = 10.10$, $SD = 5.64$) to post-assessment ($M = 7.51$, $SD = 5.89$). In comparison, the waiting-list condition

showed no significant change in severity from pre- ($M = 11.66$, $SD = 5.89$) to post-wait ($M = 11.76$, $SD = 7.29$).

The 2 (Condition) \times 2 (Time) \times 5 (TSCL subscales) mixed factorial MANOVA performed on the TSCL revealed a between-subjects effect for condition, $F(1, 142) = 9.887$, $p < .001$. Tests of between-subjects effects showed a significant difference between waiting-list and intervention conditions across all subscales. Follow up t tests indicated that the intervention participants scored significantly lower than waiting-list participants on all TSCL subscales at both pre- and post-condition assessment times.

Coping ability. A 2 (Condition) \times 2 (Time) \times 4 (CSCY subscales) mixed factorial MANOVA was performed for the CSCY. No significant main effects for condition, within-subjects main effects for time, or interactions between condition and time were found.

Future outlook. A 2 (Condition) \times 2 (Time) mixed factorial ANOVA was performed for each measure of hopelessness (KHS and BHI). Among primary school children, a significant main effect was found for condition on the KHS, $F(1, 83) = 9.100$, $p < .01$. t tests demonstrated that waiting-list and intervention groups differed significantly at post-condition assessment, $t(84) = 3.86$, $p < .001$, but not at pre-condition. Inspection of descriptive statistics revealed sense of hopelessness among intervention participants significantly decreased from pre- ($M = 3.67$, $SD = 2.34$) to post-intervention ($M = 2.90$, $SD = 2.19$), while hopelessness among waiting-list participants significantly increased from pre- ($M = 4.73$, $SD = 2.85$) to post-wait ($M = 5.14$, $SD = 2.85$). Degree of hopelessness was significantly lower at post-assessment among primary students who participated in FRIENDS compared with those who did not.

Among high school students, a significant interaction was found between condition and time, $F(1, 66) = 8.219$, $p < .01$. Simple effect analyses revealed the condition (intervention vs. waiting list) interaction to exist at post-condition assessment, $F(1, 66) = 4.520$, $p < .05$. Follow-up t tests indicated a significant reduction in severity ratings in the intervention condition from pre- ($M = 4.78$, $SD = 3.56$) to post-intervention

($M = 3.65$, $SD = 3.29$). In comparison, adolescents in the waiting-list group showed a significant increase in severity from pre- ($M = 4.50$, $SD = 3.01$) to post-wait ($M = 5.46$, $SD = 3.71$). Means and standard deviations for each self-report measure are listed in Table 2.

Treatment Integrity and Social Validity

The FRIENDS program received positive evaluations from all ethnic group participants in both primary and high school settings. With regard to group leader integrity, 69.4% of participants rated the ability of their therapist to facilitate the group extremely well, 25.4% moderately well, and 4% not very well or not at all (see Table 3 for mean scores). In terms of the content in each session, primary school participants reported learning practical ways to cope with worries as the best aspect of the program. However, high school participants varied in their response to program elements. While all groups reported that the aims of "introduction to the FRIENDS plan", and the step plan were achieved very well, the best aspects of the program were rated by former-Yugoslavian students to be problem solving, by Chinese students to be communication and relationships, and by mixed-ethnic students to be applying the FRIENDS plan. Means and standard deviations for ethnic-group ratings of treatment integrity are presented in Table 3.

Table 4 presents means and standard deviations for ethnic-group ratings of social validity. While both primary and high students reported that they enjoyed the FRIENDS program, similar to treatment integrity data, ethnic groups differed in their reports of which program elements were most useful. All groups indicated that helping others to feel good was the skill they most often used. However, unlike former-Yugoslavian students, who indicated all program elements to be useful, Chinese and mixed-ethnic participants indicated that they seldom use changing negative thoughts to positive thoughts, the step plan (graded exposure), or the six-block problem-solving plan.

For the children's version of FRIENDS, 40% of primary school students reported that they enjoyed the FRIENDS program "a lot", and

TABLE 2

Means (and Standard Deviations) of Self-report Measures for Waiting-list and Intervention Conditions

	Waiting list		Intervention	
	Pre	Post	Pre	Post
SEI				
<i>School/Academic*</i>				
<i>M (SD)</i>	4.95 (1.91)	4.41 (1.62) ^a	5.69 (1.72)	6.03 (1.94) ^a
<i>Social self/peers</i>				
<i>M (SD)</i>	5.77 (1.45)	5.09 (1.72)	4.92 (1.60)	5.21 (1.70)
RSES				
<i>M (SD)</i>	23.21 (2.42)	23.46 (1.77)	23.32 (2.61)	22.90 (2.57)
RCMAS**				
<i>M (SD)</i>	11.66 (5.89) ^a	11.76 (7.29) ^{ac}	10.10 (5.64) ^b	7.51 (5.89) ^{bc}
TSCL				
<i>Anxiety**</i>				
<i>M (SD)</i>	7.51 (3.47) ^a	7.28 (4.92) ^b	4.50 (2.48) ^a	3.74 (3.49) ^b
<i>Depression**</i>				
<i>M (SD)</i>	6.66 (3.99) ^a	7.17 (5.01) ^b	4.10 (2.29) ^a	3.66 (3.24) ^b
<i>Anger**</i>				
<i>M (SD)</i>	7.70 (4.09) ^a	7.02 (5.94) ^b	3.71 (2.64) ^a	3.65 (3.34) ^b
<i>Posttraumatic stress**</i>				
<i>M (SD)</i>	10.30 (5.08) ^a	10.57 (5.37) ^b	5.92 (2.68) ^a	6.16 (4.80) ^b
<i>Dissociation**</i>				
<i>M (SD)</i>	8.28 (3.62) ^a	8.66 (4.80) ^b	4.93 (2.79) ^a	5.09 (4.24) ^b
CSCY				
<i>Assistance seeking</i>				
<i>M (SD)</i>	5.23 (2.29)	5.52 (2.15)	5.50 (2.31)	5.54 (2.09)
<i>Behavioural avoidance</i>				
<i>M (SD)</i>	6.13 (2.76)	5.65 (4.68)	5.12 (3.04)	4.41 (2.99)
<i>Cognitive avoidance</i>				
<i>M (SD)</i>	11.50 (6.13)	9.65 (5.92)	11.64 (6.31)	9.63 (5.73)
<i>Problem solving</i>				
<i>M (SD)</i>	12.67 (4.52)	12.00 (5.26)	12.21 (4.51)	12.76 (4.83)
KHS*				
<i>M (SD)</i>	5.73 (3.65)	5.14 (2.85) ^a	3.67 (2.34)	2.90 (2.19) ^a
BHI*				
<i>M (SD)</i>	4.50 (3.01) ^a	5.46 (3.71) ^{ac}	4.78 (3.56) ^b	3.56 (3.29) ^{bc}

Note. * Between-group differences significant at .01. ** Between-group differences significant at .001.

^{a/b/c} Corresponding letters indicate the direction of each significant main effect.

TABLE 3

Means (and Standard Deviations) of Participant Ratings on the Treatment Integrity and Group Leader Integrity Questionnaires

Session objectives	F-Yugoslav M (SD)	Chinese M (SD)	Mixed-eth M (SD)
FRIENDS for children (primary school)			
Session 1: Introduction to the group	1.23 (0.43)	1.60 (0.39)	
Session 2: Introduction to feelings	1.36 (0.35)	1.78 (0.68)	
Session 3: Thoughts–feelings relationship	1.46 (0.44)	1.99 (0.73)	
Session 4: Coping with worries Steps 1, 2	1.32 (0.41)	1.70 (0.57)	
Session 5: Coping with worries Step 3a	1.29 (0.44)	1.63 (0.57)	
Session 6: Coping with worries Steps 3b, 4a	1.28 (0.47)	1.51 (0.47)	
Session 7: Coping with worries Step 4b	1.24 (0.43)	1.44 (0.41)	
Session 8: Coping with worries Step 5	1.17 (0.31)	1.61 (0.45)	
Session 9: Practicing the FRIENDS plan	1.29 (0.48)	1.67 (0.43)	
Session 10: Review and party	1.21 (0.42)	1.63 (0.67)	
FRIENDS for youth (high school)			
Session 1: Introduction to the group	1.54 (0.32)	2.05 (0.36)	1.32 (0.30)
Session 2: Focus on self-esteem	1.53 (0.47)	2.05 (0.34)	1.57 (0.31)
Session 3: Communication and relationships	1.95 (0.91)	1.46 (0.34)	1.58 (0.44)
Session 4: Introduction to FRIENDS plan	1.50 (0.30)	1.61 (0.44)	1.47 (0.37)
Session 5: Inner thoughts	1.60 (0.43)	1.77 (0.39)	1.54 (0.41)
Session 6: Support team/conflict resolution	.64 (0.40)	1.59 (0.46)	1.54 (0.37)
Session 7: Problem solving	1.26 (0.33)	1.70 (0.47)	1.63 (0.46)
Session 8: The STEP plan	1.17 (0.20)	1.50 (0.47)	1.34 (0.29)
Session 9: Applying the FRIENDS plan	1.46 (0.60)	1.82 (0.64)	1.34 (0.45)
Session 10: Review and party	1.43 (0.46)	1.62 (0.50)	1.27 (0.21)
Group leader integrity			
Positive reinforcement	1.06 (0.25)	1.37 (0.49)	1.17 (0.39)
Specific feedback	1.06 (0.25)	1.50 (0.65)	1.08 (0.29)
Self-disclosure	1.06 (0.25)	1.58 (0.68)	1.08 (0.29)
Empathy	1.06 (0.25)	1.61 (0.64)	1.08 (0.29)
Paraphrasing	1.00 (0.00)	1.63 (0.67)	1.17 (0.39)
Summarising	1.06 (0.25)	1.36 (0.54)	1.92 (1.31)
Reflection	1.06 (0.25)	1.68 (0.84)	1.08 (0.29)
Combined total	1.06 (0.16)	1.53 (0.44)	1.22 (0.31)

Note. Ratings were made using a 5-point Likert scale from 1 (*extremely well*) to 5 (*not at all*).

40% reported that they enjoyed the program “some”. Children made comments such as “I really liked the program, and learned a lot from it”. Forty-eight per cent of children reported that they learned a lot by doing the program with

classroom friends, and 33% that they learned some. Fifty-four per cent reported that they learned a lot about feelings, and 31% reported that they learned some things. Fifty-six per cent indicated that they learned a lot about how to

TABLE 4

Means (and Standard Deviations) of Participant Ratings on the Social Validity Questionnaire

Session objectives	F-Yugoslav M (SD) _a	Chinese M (SD)	Mixed-eth M (SD)
<i>How much did you:</i> ^a			
Enjoy the FRIENDS program?	1.84 (0.85)	1.88 (0.86)	1.00 (0.00)
Learn by doing the program with classmates?	1.68 (0.75)	1.79 (0.89)	1.25 (1.05)
Learn about feelings?	1.52 (0.87)	1.70 (0.73)	1.00 (0.00)
Learn how to cope with feeling worried or upset?	1.60 (0.76)	1.76 (0.79)	2.00 (0.82)
<i>How often do you use the ideas (skills) that you learned in the FRIENDS program?</i> ^b			
	2.04 (1.06)	1.91 (0.68)	1.75 (1.50)
<i>Which activities from the FRIENDS program did you find most useful?</i> ^c			
Relaxation exercises	2%	55%	50%
Deep breathing	52%	45%	25%
Thinking helpful thoughts	64%	58%	75%
Changing negative thoughts to positive thoughts	68%	33%	0%
Step plan (graded exposure)	52%	24%	0%
Six-block problem-solving plan	52%	21%	0%
Recognising feelings in yourself	68%	36%	25%
Recognising feelings in others	60%	27%	25%
Helping others to feel good	76%	73%	100%

Note. ^a Ratings were made using a 5-point Likert scale from 1 (*a lot*) to 5 (*not at all*).

^b Ratings were made using a 5-point Likert scale from 1 (*all the time*) to 5 (*not at all*).

^c Total percentage of participants who found specific activities useful.

cope with feeling worried or upset, and 27% reported they had learned some ways to cope. Thirty-one per cent of children reported that they use the ideas they learned in the FRIENDS program all the time and 48% indicated that they use FRIENDS skills some of the time. Of all skills learned in the program, children rated helping others to feel good (75%), relaxation exercises (60%), and thinking helpful thoughts (56%) as being the most useful for coping with worries and stressful problems.

For the youth version of FRIENDS, 50% of high school students reported that they enjoyed the FRIENDS program a lot, and that they learned a lot by doing the program with classmates. An additional 43% indicated that they somewhat liked the program, and learned by participating with their peers. One student commented that "the program has really helped me do a lot of things, and I would like to do it

again. It was really good". Seventy-one per cent reported that they learned a lot about feelings, with 14% indicating that they learned some principals. Twenty-one per cent reported that they learned a lot about how to cope with feeling worried or upset, 50% reporting that they learned some strategies. Rating the usefulness of the skills taught, 43% of adolescents indicated that they use FRIENDS skills all the time, and a further 36% reported using FRIENDS skills some of the time. High school students indicated that the most useful skills taught were thinking helpful thoughts (79%), helping others to feel good (79%), relaxation (71%), and deep breathing (64%) exercises.

Discussion

The main aims of this study were to evaluate the efficacy and social validity of the FRIENDS program among diverse cultural groups, and to

learn how the intervention can best be improved for future use with NESB students. With regard to self-report measures, the results suggested that participants who completed FRIENDS showed greater improvement than participants in the waiting-list group on self-esteem (primary students only), level of anxiety, and future outlook. These improvement rates are comparable with the results obtained by Barrett, Moore, et al. (2000), in their pilot of FRIENDS with former-Yugoslavian refugees.

Although scores fell within a healthy range, an interesting trend worth noting was that participants in the waiting-list condition actually reported having lower self-esteem (primary students only) and a greater sense of hopelessness at post-wait assessment. Barrett, Moore, et al. (2000) report a similar trend, whereby the severity of internalising symptoms among waiting-list participants (as measured by the Youth Self Report; Achenbach, 1991) increased between assessment intervals. Considering that the experience of acculturation that accompanies migration often changes from idealisation to disillusionment over time, cultural adjustment is theorised to maintain or advance internalising symptom severity, which in turn may plausibly contribute to lower self-esteem and more pessimistic expectations of the future. However, unlike Barrett et al., whose participants were all recent arrivals to Australia (duration in Australia < 6 months), the present sample was comprised of students who were both new and old arrivals to Australia (ranging from 2.5 months to 7.5 years). It remains unclear how long acculturation processes continue to influence emotional wellbeing. Future investigations would do well to evaluate and map the experience of cultural adjustment over time to determine patterns of acculturation, and profiles mediated by culture of origin, age, and gender. To check for long-term adjustment, all participants in the present study will be reassessed at 6-month follow-up.

Considering that participants in this study were derived from different ethnic backgrounds, were from both primary and high school levels, and migrated to Australia for a variety of reasons, it is not surprising that there were some between-group differences at pre-assessment.

Moreover, due to the small sample size and the number of assessment components, this study was statistically restricted in the comparative within-group variable analysis that could be conducted. Although it is difficult to obtain constant self-report measures among young migrants, rendering it difficult to compare conditions at pre- and post-assessment, the present data is the best that could objectively be obtained and analysed with available participants. Future investigations would do well to recruit a greater number of participants in order to adequately examine within group variables such as ethnicity, age, and reason for migration.

Failure to find any time-by-condition interactions for the RSES, TSCL, or CSCY may also be in part due to cultural group differences. Consistent with Barrett et al. (in press), who found that former-Yugoslavian, Chinese, and mixed-ethnic migrant groups respond differently to cultural adjustment, featuring culture-specific strengths and weaknesses, Sonderegger et al. (in press) suggest that standardised treatment programs may address the specific needs of some cultural groups, but not others. Accordingly, it may be hypothesised that FRIENDS (in its current format) is able to adequately address the universal symptoms associated with cultural change, but requires greater sensitivity to tap into culture-specific needs.

Data on treatment and group leader integrity indicate that the intervention was facilitated and received appropriately. Social validity ratings suggest that all groups (differentiated by school level and culture) enjoyed the FRIENDS program and found it to be valuable in learning new skills to solve problems, reduce levels of anxiety and stress, and help others to feel good. Cultural groups, however, did differ in their evaluation of which activities were most useful. For example, Chinese and mixed-ethnic participants indicated that they seldom use changing negative thoughts to positive thoughts, the step plan (graded exposure), or the six-block problem-solving plan. While it could be speculated that some cultural groups comprehend specific behaviour plans better than others, the variables that moderate comprehension (e.g., ranging from familiarity with culture-specific problem-solving styles to

FRIENDS presentation format and use of language) require further examination.

Interviews with group facilitators and participants revealed that not all activities in the existing FRIENDS program were entirely practical for use with NESB students. The number of activities required to work through per session became difficult for NESB participants, as language and comprehension barriers cause delays (especially where writing is involved). As such, facilitators felt rushed to complete all activities within the allotted timeframe specified in group leader manuals. Many students had difficulty completing written homework assignments, particularly those with only a basic grasp of English diction. It was consequently recommended that some activities be culturally enhanced through the creation of a NESB-sensitive program supplement.

Participants commented that some FRIENDS activities could be not only more culturally relevant but also fun and exciting in ways to which they can better relate. The general consensus from facilitators and participants was that activities would benefit from the incorporation of music, art, and creative stories that are personally relevant to migrant children and youth. Among high school groups, facilitators highlighted that there are differences in the levels of maturity and areas of interest between diverse cultural groups. For example, Chinese adolescents were observed to be serious and more concentrated on issues regarding cultural differences, whereas former-Yugoslavian youth were more physically mature, and more concerned with topical issues relevant to adolescence (i.e., relationships, sex, and school-yard aggression). Facilitators suggested that NESB supplement activities would benefit from the inclusion of flexible, open forums for group discussion on topics of personal concern and interest.

Conclusion

While socialisation practices (mediated by cultural beliefs, values, and traditions) are theorised to regulate the type and severity of problems that children and adolescents typically display (Barrett et al., in press; Ollendick, Yang, King, Dong, & Akande, 1996), it has recently

been acknowledged that culturally specific socialisation practices can also serve as protective mechanisms against the negative psychological outcomes often associated with cultural change (Evans & Lee, 1998). In an effort to maximise the clinical effectiveness of the FRIENDS program with NESB participants, the present study identified components that are culturally relevant, and also activities that could be further enhanced through culturally sensitive modifications. The data obtained will contribute to the development of a culturally sensitive supplement to the FRIENDS program, which, in addition to culturally modified activities, will feature process issues and NESB group-dynamic guidelines to accommodate for different beliefs, behaviours, and value systems.

Considering that FRIENDS in the present study was employed as an early intervention/prevention program for students identified in the literature to be at risk for the development of psychopathology, long-term follow-up assessment comparisons between intervention and waiting-list conditions will lend much support to this study. Although the results indicate that FRIENDS was effective in promoting self-esteem (primary students only), reducing levels of anxiety, and improving expectations of the future, it is important to consider the limitations of this study. Firstly, not all activities in FRIENDS were culturally appropriate for all groups, or practical for administration with all participants (i.e., writing assignments for newly arrived participants). Moreover, although treatment and waiting-list groups were matched for their duration in Australia, this study did not differentiate cultural groups by the length of time participants had been residing in Australia. These variables may have potentially influenced combined ethnic group intervention data. Secondly, waiting-list and intervention group numbers were not equal, reducing the power available for statistical analysis. Thirdly, the self-report measures used in this study may be limited in their cultural sensitivity, as the field of transcultural mental health is yet to develop self-report measure of emotional resiliency and distress that can systematically be used with different cultural groups. Yet, regardless of its shortcomings, the present study suggests that

group cognitive-behavioural treatment may be an effective intervention against emotional distress commonly associated with cultural change. The long-term effectiveness of FRIENDS with NESB participants of diverse cultural background is yet to be determined.

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