# BRIGHT IDEAS: A SCHOOL-BASED PROGRAM TEACHING OPTIMISTIC THINKING SKILLS IN PRE-ADOLESCENCE.

Cathy M. Brandon, Everarda G. Cunningham, & Erica Frydenberg University of Melbourne

Research into the areas of depression and resilience suggests that an optimistic attributional style is a key factor in coping effectively with stressors and functioning adaptively despite adversity. This study evaluates the effectiveness of a program designed to increase positive thinking skills, through awareness and practice, to pre-adolescent children who have been identified as exhibiting a more pessimistic explanatory style. From a total of 110 Year 5 and 6 students, 38 students were selected to participate in the program because they exhibited a more pessimistic explanatory style. Program participants were administered the Children's Attributional Style Questionnaire (CASQ) at pre-, post-, and 3-month post-program. Non-program participants completed the CASQ at pre- and 3month post- program. Results indicated that program participants significantly improved their attributional style scores post program, and that these improvements were maintained at 3-month post-program follow-up. When attributional style difference scores at pre- and 3-month post program were compared, improved scores for program participants were significantly greater than changes in attributional style scores for those students who were not in the program. Given the links between attributional style, depression, and a range of behaviours, such promising results warrant further investigation into the effects of such a program on other outcome measures. The findings provide support for the benefits to be gained by developing positive attributional style during the pre-adolescent years.

Depression has become increasingly prevalent over the past 30 years and concern is repeatedly expressed over the continuing acceleration of depression and high rates of suicide in young people (Frydenberg, 1997; Rutter, 1994). For example, Fombonne (1995) found evidence for a true increase in depression in most recent birth cohorts. Research in the United States indicated that severe signs of depression were evident in 7.2 per cent and 9 per cent of 14 yearolds in samples from Oregon and the South-eastern states respectively (Seligman, 1995). In a review of studies employing self-report measures of depression, Peterson et al. (1993) found that between 25 and 40 per cent of ado-

147

lescents reported mild to severe levels of depressive syndromes. Similar levels of self-reported depressive syndromes are suggested for Australian adolescents, with approximately 5 per cent of adolescents and 3 per cent of children experiencing clinically significant levels of anxiety and depression (Roberts, 1999). The presence of anxious and depressive syndromes in children and adolescents not only increases their risk for depressive disorders later in life (Kovacs, 1997), but is associated with a range of behavioural and emotional problems which interfere with their potential growth in the academic, social, and personal domains (Compas & Hammen, 1994).

There is an expanding body of literature that suggests that inadequate coping with stress in children of school age is a significant contributor to depression, as well as a range of other psychosocial problems (Frydenberg, 1997; Matheny, Aycock, & McCarthy, 1993; Moos, 1992). In the face of problematic, difficult and stressful situations, coping responses vary across individuals according to the situation and a person's perception of the situation (Brotman-Band & Weisz, 1988). While research on stress in school-aged individuals is not as well documented as it is in adult populations (Compas, 1987; Schwarzer & Schwarzer, 1996), a coping strategy or resource that children and adolescents have found effective in dealing with life stressors is optimistic or positive thinking (Jaycox, Reivich, Gillham & Seligman, 1994). In particular, positive thinking has been identified as an important element in individuals who display resilience (Fine, 1991; Garmezy, 1988). Equally, negative thinking may be perceived as a behaviour counterproductive to coping effectively with stress.

Seligman (1995) suggests that negative thinking is not only an ineffective coping response, but that it actually puts a person at risk of developing symptoms of depression. When faced with negative events, children who habitually view the cause of these events as permanent in time, global in effect, and associated with some fault internal to themselves will be especially vulnerable to helplessness. These children will be more likely to exhibit passivity and sadness, and they are also more likely to show other deficits in areas including assertiveness, competitiveness and cognitive functioning (Nolen-Hoeksema, Girgus, & Seligman, 1986). When an individual regularly interprets or explains events in such a pessimistic fashion, they may be said to have a negative or maladaptive attributional or explanatory style (Nolen-Hoeksema et al.). Individuals inclined to make pessimistic appraisals of situations tend to experience increased stress as they feel unable to cope and are thus "more prone to depressive episodes than persons without this maladaptive explanatory style" (Nolen-Hoeksema et al., p.436). Hence, a child's initial perception or cognitive appraisal of a situation appears to be of great importance in determining whether the child will respond in an adaptive or maladaptive way (Rutter, 1985). Furthermore, Seligman suggests that by the time a child is about nine or ten, a negative explanatory style in appraising stressful events is habitual unless such a style of thinking is challenged.

In support of the notion that a maladaptive explanatory style may render a person more at-risk for depression, research focussing on pessimism has found that negative cognitions, and, in particular, negative self-talk, were bet-

ter predictors of depression than negative life events (Matheny et al., 1993). Furthermore, in a study of school children aged 8-13 years, Seligman et al. (1984) administered the Children's Attributional Style Questionnaire (CASQ), a forced-choice questionnaire measuring explanatory style, and a children's depression inventory twice within a 6-month interval and found significant positive correlations between a negative explanatory style and depression scores. In addition, a maladaptive explanatory style was found to be a good predictor of depression levels. Similarly, Nolen-Hoeksema, Girgus and Seligman, (1992) found that a pessimistic explanatory style was a significant predictor of depressive symptoms in pre-adolescents.

The value of a positive or more optimistic explanatory style is supported by various studies which link optimism to better health outcomes and more successful coping (e.g. Beardslee, 1990; Matheny et al., 1993; Segerstrom, Taylor, Kenny, & Fahey, 1988). Schwartz (1986) described optimistic or positive self-talk as part of an internal dialogue which struggles between positive and negative statements, and he argued that it is positive thinking which differentiates between people who cope effectively and ineffectively. In addition, when individuals are dealing with stressors, problem solving is facilitated by thinking positively (Matheny et al., 1993).

There have been a number of programs designed to promote healthy development and to help young people cope with generic or normative stresses as well as the acute and chronic ones (Compas, 1995). The focus of the intervention may be on the sources of stress or on factors that strengthen resistance and build resilience (Moos, 1992). In particular, programs utilising rational emotive therapy for children over the age of 8 years in order to develop cognitive awareness have been shown to be very effective whenlanguage and examples appropriate to the age of the child are used (Bernard & Joyce, 1993). Consistent with Seligman's (1995) theory, changing students' explanatory style from negative to positive, or facilitating the learning of optimistic thinking, was identified as a very effective way to prevent depressive symptoms and help children aged 10-13 years deal with stress (Jaycox et al., 1994).

While gains have been made through some early intervention programs attempting to build resilience in young people (Clarke et al., 1995; Jaycox et al., 1994), these studies have encountered difficulties in maintaining program participants because the programs were conducted outside of normal school hours. Furthermore, the evaluation of these programs may be confounded by a self-selection bias because only the more motivated participants complete the program (Shochet, personal communication). Given that schools are generally considered to be one of the best settings for the implementation of primary prevention programs for young people (Spence, 1994), and that schools are continually being asked to play a larger role in the development of psychosocial competence in children and adolescents (Frydenberg, 1997), the present study implements a program in the school setting to pre-adolescents who have been identified as exhibiting a more pessimistic explanatory style. The program developed for this purpose, Bright Ideas, aims to facilitate the learning of optimistic thinking skills (identification, evaluation, modification and generation of thoughts) in order to enhance coping

skills. This will be done through raising the participant's awareness that thoughts (rather than events) control feelings, and through encouraging them to evaluate their thinking and explore alternatives. The program employs cognitive-behavioural techniques as these are commonly used in the treatment of adult depression and have also been shown to be effective when used with pre-adolescents (Jaycox et al., 1994).

Because of the effort, motivation and practice often required to make lasting cognitive changes (Ellis, 1987), parents and teachers of program participants will receive comprehensive information in plain language about the nature and content of the program, and ways in which they can support and reinforce the student's learning during and beyond the program.

It was predicted that students participating in the program would show improvements in their explanatory style at the end of the program, and that these improvements would be maintained at 3-month follow-up. Furthermore, improvements in student's attributional style will be greater for program participants than for those students who do not participate in the program.

# Method

## Participants

Participants were recruited by way of a letter sent to all parents of Years 5 and 6 children at two Catholic primary schools in the outer Melbourne suburbs. Of the 264 letters sent, a positive return rate of 46 per cent was received. In the initial letter requesting parental permission for children to participate, parents were informed that children would be completing questionnaires and that some children would subsequently be invited to participate in a program. Eleven children were absent on the initial day of testing. In total, 110 students, comprised of 52 male and 58 female students, and ranging in age from 9 to 11 years, completed the questionnaires. A further letter to parents of selected children which requested consent for their child to participate in the program resulted in a positive return rate of 80 per cent. In total, 37 students (16 males and 21 females) also participated in the Bright Ideas program. Despite parental consent, one child elected not to participate in the program. The families from which the students came were mostly from low to middle class socio-economic backgrounds, and predominantly Anglo-Celtic.

## Materials

## Children's Attributional Style Questionnaire

(CASQ; Kaslow, Tanenbaum & Seligman, 1978). The CASQ is a self-report assessment of explanatory style for positive and negative events. There are 48 items which include 24 good and 24 bad events on the topics of achievement in school and sport, and relationships with parents and peers. Respondents are asked to choose possible reasons as to what they believe to be the cause of the hypothetical events. For example, item 5 stating "All of your friends catch a cold except you" is followed by the two choices of (a) I have been healthy lately, and (b) I am a healthy person. Respondents are forced to make a choice between the two alternatives given. A response of (b) would contribute to the tally of the permanent sub-scale for good events.

The CASQ has six sub-scales: the permanence (stability), pervasiveness (globality) and personalisation (internality) for bad events and for good events. An explanatory style score for positive events is obtained by combining the scores on the three good event sub-scales, and an explanatory style for negative events is obtained by combining the scores on the three bad event sub-scales. An overall score for explanatory style is obtained by subtracting the composite score for bad events from the composite score for good events. Higher scores indicate a more optimistic or positive explanatory style, while lower scores indicate a pessimistic explanatory style.

## Program: Bright Ideas

The Bright Ideas program was specifically written by the first-named author for this study. It consisted of six onehour weekly sessions in which students were taught how to listen to their thoughts and how to identify whether their thoughts were negative or positive. This was followed by teaching skills in critical evaluation and in generating alternatives using positive thinking. The program adapted the main techniques that cognitive therapists use for working with depressed children to use with children who were not depressed. Using the principles outlined in Seligman's (1995) successful work on optimistic thinking, learning was facilitated through the use of stories, cartoons, hypothetical examples, practice and role playing. Specifically, the program incorporates the four basic skills of optimistic thinking (McWhirter, McWhirter, McWhirter, & McWhirter, 1998). These are:-

- (i) Catching thoughts. Children are taught how to listen to the negative thoughts they say to or about themselves, or about negative things that happen. Recognising that changing thoughts can lead to changes in mood and behaviour is then explored.
- (ii) Evaluating thoughts. This skill involves the evaluation of the negative and habitual thoughts children say to themselves. Children gather evidence to support or challenge their negative thinking so that they can determine the accuracy of their thinking.
- (iii) Generating alternatives. When negative events happen, more accurate attributions are possible. Children are taught to challenge their immediate negative thoughts and generate alternative explanations for negative events. By stopping the chain of negative thinking, one's feeling about the event improves.
- (iv) Decatastrophising. Children are taught to stop thinking the worst as, mostly, the worst is very unlikely to happen.

The six sessions focussed on: (1) the connection between thoughts and feelings; (2) how different thoughts lead to different feelings; (3) evaluating thoughts through checking ideas; (4) asking why things happen, and looking at blaming self and others; (5) projecting realistically by not thinking the worst; and (6) review and closure.

A set of supplementary notes outlining the program and suggesting ways in which parents and teachers can support and reinforce children's learning of the program goals and skills was also available.

## Procedure

The CASO was administered to student participants in a classroom setting during normal school hours and under standard test conditions. Each question was projected on the wall as well as being read aloud by the facilitator. The selection of program participants was based upon Seligman's (1995) published selection criteria which indicates that girls scoring a total of fewer than 5 on the CASQ are 'somewhat pessimistic' and fewer than 4 are 'very pessimistic'. Boys scoring fewer than 3 are 'somewhat pessimistic' and fewer than 1.5 are very pessimistic. In the present study, girls scoring fewer than 5 and boys scoring fewer than 3 participated in the Bright Ideas program. Three groups of children, ranging in size from 12-14 students, were withdrawn from normal classes for one hour weekly program sessions for six weeks. The program was implemented by the first author who is a registered psychologist<sup>1</sup>. The CASQ was readministered to program participants following the completion of the program. Three months post program, the CASQ was again readministered to both program and non-program participants. Detailed written information for parents and teachers of program participants was also provided. This information outlined the program goals and skills, and ways in which parents and teachers can assist children's learning through modelling and reinforcement.

#### Results

#### Sample Representativeness

Means for the overall scores on the CASQ were compared to Seligman's (1995) published norms of 6.50 for girls and 5.05 for boys. For the 110 children screened, the mean for girls was significantly lower ( $\underline{M} = 5.16$ ,  $\underline{SD} = 4.35$ ) than Seligman's published mean of 6.50,  $\underline{t}(57) = -2.34$ , p < .05. This indicated that the Australian sample of girls was slightly more pessimistic. No significant difference was found in the boys' mean scores ( $\underline{M} = 4.48$ ,  $\underline{SD} = 3.73$ ) when compared to the published mean of 5.05,  $\underline{t}(51) = -1.10$ ,  $\underline{p} > .05$ .

The means and standard deviations for attributional style of program participants at pre-, post- and 3-months post-program are shown in Table 1. A one-way repeated-measures multivariate analysis of variance (MANOVA) was conducted to determine the effect of the program on the negative and positive scale scores of the CASO. Significant differences were found over time, Wilks'  $\wedge = .14$ , <u>F</u> (4,32) = 50.99, <u>p</u> < .001. Tukey's post hoc tests found that the mean negative score on the CASQ at the end of the program was significantly less than the pre-program score, and that this improvement was maintained at 3-months post-program follow-up. While no significant difference in scores was found at pre- and post- program for the positive scale scores, the mean score at 3-months post-program was significantly greater than the post-program score.

Table 2 displays the means, standard deviations and difference scores at preand 3-month post-program follow-up for program and non-program participants. To determine whether gains

<sup>&</sup>lt;sup>1</sup> The program can be implemented by school counsellors and psychologists, or by class-room teachers.

#### **Bright Ideas**

	Pre-program		Time Post-prog	Time Post-program		3-months post		
CASQ scale Negative	<u>M</u> 12.00 <sup>q</sup>	SD 2.06	M 7.40 <sup>b</sup>	SD 2.37	M 7.49b	SD 2.78	F 89.28*	
Positive	13.16a,b	2.11	12.27ª	2.99	14.38 <sup>b</sup>	3.48	8.74*	
NI-L- NI	1				4 A.v. 11 .			

 Table 1: Means and standard deviations for program participants on the Children's Attributional Style Questionnaire over time.

Note: Negative = total negative scores on CASQ (Children's Attributional Style Questionnaire); Positive = total positive scores on CASQ; N = 37. Different superscripts indicate where significant differences exist.

\* p < .001

made by program participants on the negative and positive dimensions of the CASQ over the 3-month period were greater than any gains for those children who did not participate in the program, a one-way between-groups MANOVA was conducted. Significant differences were found between the program and non-program groups when based on difference scores over time, Wilks'  $\Lambda = .70$ , F(2,94) = 20.36, p < .001. Over the 3-month period, children who participated in the program reduced their negative attributional style scores significantly more than non-program chil-

dren. For the positive scores, program children also made significant gains on this dimension when compared to the non-program children.

## Discussion

This study investigated whether a school-based cognitive-behavioural program would effect a positive change in explanatory style, and whether these changes would be maintained three-months post-program follow-up. There was a significant reduction in the negative attributions of the program partici-

 

 Table 2:
 Means, standard deviations and difference scores for program and nonprogram participants on the Children's Attributional Style Questionnaire over time.

	_					
	Pre-program		3-months post			
CASQ	м	SD	м	SD	Difference	e F
Negative Program	12.00	2.06	7.49	2.78	-4.51	
Non-program	8.32	1.93	6.59	2.46	-1.73	23.24*
Positive Program	13.16	2.11	14.38	3.48	1.22	
Non-program	15.39	2.43	13.54	3.09	-1.85	21.21*

Note: Negative = total negative scores on CASQ (Children's Attributional Style Questionnaire); Positive = total positive scores on CASQ; N = 98.

\* p < .001

pants following the intervention program, and this reduction was maintained over the three month period following completion of the program. At this time, scores for girls on the CASQ were very similar to the average scores reported by Seligman (1995), and for boys, closer to what Seligman termed optimistic. In addition, children in the program made significantly greater gains towards a more positive attributional style over a three-month period than did children who did not participate in the program. The positive changes in attributional style were likely to be the result of the Bright Ideas intervention program. As teachers and parents of children were provided with information on how to support children's learning of the skills contained in the program, the results may be partly due to the support and encouragement they provided.

The change in the negative dimension of explanatory style found in this study is consistent with results found by Jaycox et al., (1994), and supports research which maintains that explanatory style can be changed in pre-adolescents through the use of early intervention programs (Clarke et al., 1995). It would seem that the program was most effective in decreasing the participants' negative attributions to negative events in their lives. Jaycox et al. suggest that it is this negative-permanent dimension of explanatory style which is not only a symptom of depression, but "may have an important etiologic or maintaining role in the expression of depressive symptoms" (p. 813). They further suggest that the success of intervention programs with children that are based on cognitive-behavioural techniques may be as valuable in therapy for children as much as for adults.

Since the CASQ scores formed the basis of selection into the program, any findings reported here need to be interpreted cautiously as there is always the possibility that the results found may be due to the regression to the mean effect. Future studies evaluating the effectiveness of the Bright Ideas program would require a placebo or wait-list control group. In addition, longitudinal studies monitoring program gains over a longer period of time, and especially over the stressful transition period from primary to secondary school, are warranted.

A relationship between depression and a negative explanatory style was assumed in this study on the basis of previous research (e.g. Nolen-Hoeksema et al., 1986; Seligman, 1992; Seligman et al., 1984). However, this study did not address the direct impact of the program upon levels of depression. Program participants were considered to be "at risk" for depression on the basis of their CASQ scores. The significant changes in explanatory style scores following the intervention might suggest a reduction in depressive symptoms. Future research, in which measures of depressive symptomology are included, is required before such conclusions may be drawn. In addition, while previous research has shown that using cognitive- behavioural intervention programs to reduce depression have also had a positive effect on behaviour, the impact of the Bright Ideas program upon the participant's behaviour was not assessed. Hence, further studies are required which measure program effects on depressive symptoms and behavioural outcomes.

A further avenue for investigation is the significance of parental and teacher reinforcement of program skills in ad-

## **Bright Ideas**

dition to the program. It has been suggested that where parents and / or teachers are able to model skills on an ongoing basis, such modelling may be critical to maintaining program effects over long periods of time (Jaycox et al., 1994). In this study, parents and teachers were provided with written information but no attempt was made to evaluate the extent to which such information was understood or utilised. If modelling by teachers and parents is a key element in promoting a more optimistic thinking style in children, concurrent programs could be run for teachers and parents. Alternatively, a program such as Bright Ideas might be incorporated into the school curriculum, with teachers as the facilitators. In this way, the promotion of more optimistic ways of thinking could become part of the philosophy of the whole school, and would ensure that the modelling and reinforcement of skills is on-going.

In summary, children's explanatory style became more optimistic following participation in a short-term cognitivebehavioural program designed to change pessimistic thinking. The program reported in this study shows promise as an early intervention program, and could possibly be implemented on a larger scale as a universal school-based preventive program designed to increase resilience in young people through the development of a more optimistic explanatory style.

#### References

Beardslee, W.R. (1990). The role of understanding in resilient individuals: The development of a perspective. *Annual Progress in Child Psychiatry and Development*, 3, 52-69. Bernard, M.E., & Joyce, M.R. (1993). Rational-emotive therapy with children and adolescents. In Kratochwill, T.R. & Morris, R.J. (Eds.), *Handbook of Psychotherapy with Children and Adolescents* (pp. 258-287). Massachusetts: Allyn and Bacon.

Brotman-Band, E., & Weisz, J.R. (1988). How to feel better when it feels bad: Children's perspectives on coping with everyday stress. *Developmental Psychol*ogy, 24, 247-253.

Clarke, G. W., Hawkins, W., Murphy, M., Sheeber, L. B., Lewinson, P. M., & Seeley, J. R. (1995). Targeted prevention of unipolar depressive disorder in an atrisk sample of high school adolescents: A randomised trial of a group cognitive intervention. *Journal of the American Academy of Child Adolescent Psychiatry*, 34, 312-321.

Compas, B.E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, 10, 393-403.

Compas, B.E. (1995). Promoting successful coping during adolescence. In M. Rutter, (Ed.). *Psychological disturbances in young people: Challenges for prevention* (pp. 247-273). New York: Cambridge University Press.

Compas, B. E., & Hammen, C. L. (1994). Child and adolescent depression: Covariation and comorbidity in development. In R. J. Haggerty, L. R. Sherrod, N. Garmezy, & M. Rutter (Eds.), Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and interventions (pp. 225-267). Cambridge: Cambridge University Press.

Ellis, A. (1987). A sadly neglected cognitive element in depression. *Cognitive Therapy and Research*, 11, 121-146. Fine, S. (1991). Resilience and human adaptability: Who rises above adversity? *American Journal of Occupational Therapy*, 45, 493-503.

Fombonne, E. (1995) Depressive disorders: Time trends and possible explanatory mechanisms. In M. Rutter & D. J. Smith (Eds.), *Psychological Disorders in Young People* (pp. 544-615). West Sussex: John Wiley & Sons.

Frydenberg, E. (1997). Adolescent Coping: Theoretical and Research Perspectives. London: Routlage.

Garmezy, N. (1983). Stressors of childhood. In N. Garmezy & M. Rutter (Eds.). Stress, coping, and development in children (pp. 43- 84). NY: McGraw-Hill.

Jaycox, L.H., Reivich, J.G., Gillham, J. & Seligman, M.E.P. (1994). Prevention of depressive symptoms in school children, *Behavioural Research and Therapy*, 32, 801-816.

Kovacs, M. (1997). The Emanuel Miller Memorial Lecture 1994. Depressive disorders in childhood: An impressionistic landscape. *Journal of Child Psychology and Psychiatry*, 38, 287-298.

MacIver, D.J. & Epstien, J.L. (1991). Responsive practices in the middle grades: Teacher teams, advisory groups remedial instruction and school transition programs. Special Issue: *Development* and education across ad8olescence. American Journal of Education, 99, 587-622.

Matheny, K. B., Aycock, D. W., & McCarthy, C.J. (1993). Stress in schoolaged children and youth, *Educational Psychology Review*, 5, 109-134. McWhirter, J.J., McWhirter, B.T., McWhirter, A.M., & McWhirter, E.H. (1998). *At-risk youth: A comprehensive response*. Pacific Grove, CA: Brooks/Cole.

Moos, R.H. (1992). Understanding individuals' life contexts: Implications for stress reduction and prevention. In M. Kessler, S.E., Goldston, S.E., & J. M. Joffe (Eds.), *The present and future of prevention* (pp. 196-212). Newbury Park, CA: Sage.

Nolen-Hoeksema, S., Girgus, J.S., & Seligman. M.E.P. (1986). Learned helplessness in children: A longitudinal study of depression, achievement, and explanatory style, *Journal of Personality and Social Psychology*, 51, 435-442.

Nolen-Hoeksema, S., Girgus, J.S. & Seligman. M.E.P. (1992). Predictors and consequences of childhood depressive symptoms, *Journal of Abnormal Psychology*, 101, 405-422.

Petersen, A.C., Compas, B.E., Brooks-Gunn, J., Stemmler, M., Ey, S., & Grant, K. E. (1993). Depression in adolescence. *American Psychologist*, 48, 155-168.

Roberts, C. M. (1999). The prevention of depression in children and adolescents. *Australian Psychologist*, 34, 49-57.

Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder, *British Journal of Psychiatry*, 147, 598-611.

Rutter, M. (1994). Stress research: Accomplishments and tasks ahead. In R. J. Haggerty, L. R. Sherrod, N. Garmezy & M. Rutter (Eds.), Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and interventions (pp. 354-386). Cambridge: Cambridge University Press.

#### **Bright Ideas**

Schwartz, R.M. (1986). The internal dialogue: On the asymmetry between positive and negative coping thoughts, *Cognitive Therapy and Research*, 10, 591-605.

Schwarzer, R. & Schwarzer, C. (1996). A critical survey of coping instruments. In N. Zeidner & N.S. Endler (Eds.). *Handbook of Coping: Theory, research, applications* (pp. 107-132). NY: John Wiley & Sons.

Segerstrom, S. C., Taylor, S. E., Kemeny, M. E., & Fahey, J. L. (1988). Optimism is associated with mood, coping and immune change in response to stress, *Journal of Personality and Social Psychology*, 74, 1646-1655.

Seligman, M.E.P., Peterson, C., Kaslow, N.J., Tanenbaum, R.L., Alloy, L.B., & Abramson, L.Y. (1984). Attributional style and depressive symptoms among children, *Journal of Abnormal Psychology*, 93, 235-238. Seligman, M.E.P. (1992). Learned Optimism. NSW, Australia: Random House.

Seligman, M.E.P. (1995). *The Optimistic Child*. NSW, Australia: Random House.

Shochet, I. The Griffity early intervention depression project: Progress report on a school-based program for the prevention of adolescent depression. Unpublished manuscript, Griffith University, Brisbane.

Spence, S. H. (1994). Preventative strategies. In T. H. Ollendick, N. J. King, & W. Yule (Eds.), *International handbook of phobic and anxiety disorders in children and adolescents* (pp. 453-474). New York: Plenum.

Adress correspondence to: Everarda Cunningham Department of Learning and Educational Development Faculty of Education University of Melbourne Parkville 3052 Victoria Australia Email: a.cunningham@edfac.unimelb.edu.au

Australian Journal of Guidance & Counselling Vol. 9, No. 1, 1999