



&



EVIDENCE BASE

ABSTRACTS

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Introduction

The FRIENDS program is a cognitive-behavioural anxiety program for children and youth. It is the only evidence-based program endorsed by the World Health Organization as an effective program for the prevention and treatment of anxiety and depression in children and youth.

Anxiety is the most common form of psychological disorder, affecting up to 20% of children and teenagers. If left unattended, anxiety significantly interferes with a child's development and can cause serious problems in later life, such as social isolation, underachievement and depression.

'FRIENDS' Programs focus on developing emotional resilience in children and adolescents. It has been scientifically proven to be effective in building emotional and social skills and resilience strategies that are practical and useful for coping with times of worry and stress. And they are skills that will stay with children for life. Families are also empowered also as they get involved and help their children to implement their new skills and strategies.

The program's founder, Dr. Paula Barrett published the world's first family treatment control trial for childhood anxiety in 1996. Since then, she and her research team have been credited with publishing more controlled trials for childhood anxiety than any other group in the world.

More recently, Dr. Paula Barrett published Fun Friends; an adaptation of the FRIENDS for Life program that teaches emotional resilience to 4 to 7 year olds that will stay with children for life, and teaches practical, useful strategies for coping with stress, worry, fear and sadness. With Fun Friends, children will gain the emotional and social intelligence necessary to excel during their school years. This program will help your children have a smooth transition into school, and improve their confidence and social skills. It is an empowering program for children, parents and teachers in life skills and resilience strategies.

Research and evaluation of FRIENDS, including independent replication studies continues throughout Australia and overseas today. Within Australia, several large-scale school-based trials in WA, NSW and QLD have confirmed the program's ease of use, social acceptability and appropriateness as a universal prevention approach. Internationally, trials in the Germany, Norway, Finland, The Netherlands and Mexico have shown the effectiveness of FRIENDS when translated into other languages. Research from the United States, the United Kingdom, and Canada also show effectiveness in these cultures. Adaptations have also been made to the program's English delivery to accommodate Australian children from non-English speaking backgrounds and Australian Indigenous populations.

The abstracts presented in this booklet presents the program's development from 1996 through the present day and feature research on 'Coping Koala' as the program was first known and 'FRIENDS' as it was renamed in 1999. They are grouped by year of publication starting from the newest.

Research Abstracts

2010

Universal School-based Intervention – United Kingdom

Stallard, P. (2010). Mental health prevention in UK classrooms: The FRIENDS anxiety prevention programme. *Emotional and Behavioural Difficulties*, 15(1), 23-35.

Childhood anxiety is a common condition which, if untreated, can cause considerable distress and impairment and increase the likelihood of mental health problems in adulthood. Developing good emotional health in children is therefore an important objective which has been emphasised in recent governmental initiatives and policies. In particular, schools have been identified as having an important role in promoting positive mental health in children. This paper summarises the different approaches, outcomes and shortfalls of school-based anxiety prevention programmes. One particularly encouraging programme based upon cognitive behaviour therapy, the FRIENDS for Life programme, is described. Outcomes from UK-based studies evaluating FRIENDS are summarised and the way the programme can be integrated within schools to complement other initiatives discussed. Finally, limitations of the current research are discussed and issues about the practical implementation of FRIENDS in schools highlighted.

Indicated intervention - Scotland

Liddle, I. & MacMillan, S. (2010). Evaluating the FRIENDS programme in a Scottish Setting. *Educational Psychology in Practice*, 26(1), 53-67.

This study used an “indicated prevention” approach to attempt to replicate very positive international evaluations of the FRIENDS for Life programme. Using standardised self-report measures of anxiety, low mood and self esteem with groups of children from four schools, the study found significant improvements in all of these measures following the 10-week programme, which were sustained four months later. Positive findings were also obtained from an examination of the programme’s impact on children’s social skills. Implications for improving emotional well-being and educational outcomes for children in Scottish schools are discussed.

School-based Intervention – Fun Friends

Pahl, K.M., & Barrett, P.M. (2010) Preventing anxiety and promoting social and emotional strength in preschool children: A universal evaluation of the Fun FRIENDS program. *Advances in School Mental Health Promotion*, 3(3), 14-25.

This study sought to examine, for the first time, the efficacy of The Fun FRIENDS program (Barrett, 2007a, b), a school-based, universal preventative intervention program for preschool children. The Fun FRIENDS program aims to teach children cognitive-behavioural strategies in a play-based manner to prevent anxiety and to increase social and emotional strength. Participants were 263 children aged four to six years attending preschool in Brisbane, Australia. Schools were randomly allocated to an intervention group (IG) or a waiting list control group (WLG). Parent report data revealed no significant differences between the IG and WLG on anxiety, behavioural inhibition (BI) and social emotional strength at post-intervention. At 12-month follow-up, improvements were

found on anxiety, BI and social-emotional competence for children in the IG. Teacher reports revealed significant improvements at post-intervention on BI and social-emotional strength for children who had received the program. The implications of these findings are discussed, along with limitations and directions for future research.

2009

Selective Intervention – Norway

Martinsen, K.D., Aalberg, M., Gere, M., & Neumer, S.P. (2009). Using a structured treatment, Friends for Life, in Norwegian outpatient clinics: results from a pilot study. *The Cognitive Behaviour Therapist*, 2, 10-19.

CBT treatment programmes for children and adolescents with anxiety disorders are promising as indicated by efficacy research. Replicating this research in ordinary clinical care is crucial in order to establish the validity of these results and disseminate empirically based treatments to practitioners. This paper presents the first experiences of using a structured programme, the Friends for Life manual, in ordinary clinical care in Norway targeting anxiety problems in children aged between 7 and 12 years. The effects of the treatment are presented as multiple single-case studies. Clinical meaningful change is considered from two perspectives; diagnostic change and changes in self-report measures. At a statistical significance level the treatment effect can be characterized as modest. Independent of the symptom reduction, the children, families and therapist are in the main satisfied with the structured approach indicating the acceptability of the programme.

Universal Intervention – Canada

Rose, H., Miller, L., & Martinez, Y. (2009). "FRIENDS for Life": The results of a resilience-building, anxiety-prevention program in a Canadian elementary school. *ASCA Professional School Counselling*, 12(6), 400-407.

The purpose of the study in this article was to replicate past findings showing the effectiveness of a cognitive behavioural resilience-building/anxiety-prevention program, "FRIENDS for Life". The results of the controlled study of two Grade 4 classrooms in Canada (N=52) indicate that all children reported reduced levels of anxiety regardless of receiving the FRIENDS program. Limitations of the study are discussed and future research concerning schools counselling programs using evidence based approaches is highlighted.

2008

Universal Intervention – South Africa

Mostert, J, & Loxton, H. (2008). Exploring the effectiveness of the FRIENDS program in reducing anxiety symptoms among South African children. *Behaviour Change*, 25(2), 85-96.

The prevalence of anxiety symptoms among South African children is reported to be significantly higher than in other parts of the world. The need for an effective anxiety prevention and early intervention program for use with South African children is urgently needed. The aim of the present study was therefore to determine whether the Australian FRIENDS program could effectively reduce the anxiety symptoms, as measured by the Spence Children's Anxiety scale (SCAS), among a sample of South African children from low socioeconomic background. The program evaluation employed a quasi-experimental, non-equivalent control group design that followed participants ($N = 46$) over a course of 10 months. Within group effects and between group effects revealed that the FRIENDS program had little statistically significant post-intervention effect on the anxiety symptoms of this sample, but had significant effects in the longer term, at 4 months and 6 months follow-up. The implications of these results for the South African context are discussed.

Universal School-based Intervention

Schoenfeld, N.A., & Janney, D.M. (2008). Identification and treatment of anxiety in students with emotional or behavioral disorders: A review of the literature. *Education and Treatment of Children, 31*(4), 583-610.

Anxiety affects school achievement, yet it is rarely targeted for intervention in students with emotional or behavioral disorders (EBD). This review of the literature summarizes existing research on (1) the prevalence of anxiety disorders in students with EBD, (2) the academic effects of anxiety disorders, and (3) the school interventions designed to ameliorate them. We offer conclusions regarding the state of educational intervention for these students. The review also highlights the scarcity of studies related to anxiety in students with EBD. Past research has focused primarily on students in general education settings, on prevalence within the general population, and on measuring psychosocial symptoms, rather than on academic achievement. We comment on the relevance of these findings to the field of EBD, and discuss implications for further research.

Universal School-based Intervention – One-year Follow-up United Kingdom

Stallard, P., Simpson, N., Anderson, S., & Goddard, M. (2008). The FRIENDS emotional health prevention programme: 12 month follow-up of a universal UK school based trial. *European Child and Adolescent Psychiatry, 17*, 283-289.

A universal cognitive behaviour therapy emotional health programme, FRIENDS, was provided in schools by trained school nurses to 106 children aged 9/10. Anxiety and self-esteem were re assessed in 63 children one year after completing the programme. The significant improvements in emotional health identified 3 months after FRIENDS were maintained 12 month after completing the programme. Of the 9 children identified at baseline as high risk, 6 (67%) had moved into the low risk category by the 12 month follow-up. Of the low risk children, none had become high risk by follow-up. The study conclusions are limited by a small sample size and the absence of a comparison group. They are however consistent with previous studies and suggest that FRIENDS delivered in schools as a universal intervention can have a significant medium term effect upon emotional health.

2007

Universal School-based Intervention – United Kingdom

Stallard, P., Simpson, N., Anderson, S. Hibbert, S. & Osborn, C. (2007). The FRIENDS emotional health: Initial findings from a school-based project. *Child and Adolescent Mental Health, 12*(1), 32-37.

Emotional disorders in children are common and although effective interventions are available comparatively few receive specialist help. School nurses were trained to deliver an evidence-based emotional health cognitive behaviour therapy programme, FRIENDS, to 106 non-referred children aged 9–10 attending three schools. Levels of anxiety and self-esteem were stable in the 6-month period before FRIENDS. Three months after completing FRIENDS, anxiety had significantly decreased and self-esteem increased. Children with the most severe emotional problems benefited from the programme. The value of delivering standardised evidence based programmes in schools by school nurses is discussed and the need for further research highlighted.

Universal Intervention – Preschool-aged children

Pahl, K.M., & Barrett, P.M. (2007). The development of social-emotional competence in preschool-aged children: An introduction to the Fun FRIENDS program. *Australian Journal of Guidance and Counselling, 17*(1), 81-90.

The development of social–emotional competence is of key importance during early childhood, particularly during the preschool years. We too often believe that early childhood education should focus on the promotion of academic skills to increase intelligence and, therefore, neglect the importance of social and emotional learning. Children who are socially and emotionally well adjusted do better at school, have increased confidence, have good relationships, take on and persist at challenging tasks and communicate well. The school setting is the optimal environment to implement interventions focused on increasing social–emotional competence. This article examines the importance of developing social–emotional competence during the early years of life and discusses universal intervention approaches within the classroom. A particular universal intervention program — The Fun FRIENDS program (Barrett, 2007) — aimed at increasing social–emotional competence is described in detail. The Fun FRIENDS program is a developmentally tailored, downward extension of the pre-existing, evidence-based FRIENDS for Life program (Barrett 2004; 2005).

Universal School-based Prevention

Farrell, L.J., & Barrett, P.M. (2007). Prevention of childhood emotional disorders: Reducing the burden of suffering associated with anxiety and depression. *Child and Adolescent Mental Health, 12*(2), 58-65.

Anxiety and depression are the most common mental health problems affecting young people today. This review presents a description of the prevalence and impact of these emotional disorders in children and youth. While treatment offers one approach to intervening, research indicates that

most sufferers will not actually receive clinical intervention, and of the minority who do, many will terminate prematurely, fail to respond, or experience recurrent difficulties despite treatment. Prevention approaches offer an alternative and adjunct to treatment, and have become a priority for governments, offering a cost effective and efficient means of providing services to children and youth prior to the onset of psychopathology. This review describes current practises in prevention research and provides an overview of an Australian developed cognitive behavioural programme that has acquired a solid evidence-base as well as popularity in schools as one approach to building emotional resilience in children and youth, whilst effectively reducing the burden associated with emotional disturbances of anxiety and depression. Future directions for prevention practice and research are highlighted.

2006

Universal School-based Intervention – Anxiety Management

Barrett, P.M., & Pahl, K.M. (2006). School-based intervention: Examining a universal approach to anxiety management. *Australian Journal of Guidance and Counselling. Special Issue: MindMatters Plus: A national mental health initiative in secondary schools.* 16(1), 55-75.

Anxiety disorders are among the most common mental health problems affecting children and adolescents. Current estimates indicate that 1 in 5 children or 4 to 6 students within a classroom of 30 children are at risk for developing an anxiety disorder (Boyd, Kostanski, Gullone, Ollendick, & Shek, 2000). Of these children, many will not receive clinical intervention. The school environment is the optimal setting to address this issue and to minimise the risk and prevent the development of anxiety disorders. This article examines the importance of early intervention and prevention within the school setting through an examination of the risk and protective factors of anxiety and the comparability of three approaches to prevention in schools – selective, indicated, and universal approaches. All three prevention approaches are discussed along with the advantages and disadvantages of each. The applicability of the universal approach to prevention is discussed in relation to the FRIENDS for Life (FRIENDS) program (Barrett, 2004, 2005) and its implementation within schools. The FRIENDS program is an evidence-based, cognitive-behavioural anxiety program for children and youth. It is the only evidence-based program endorsed by the World Health Organization as an effective program for the prevention and treatment of anxiety and depression in children and youth.

Universal School-based Intervention – Long Term Outcomes

Barrett, P.M., Farrell, L.J., Ollendick, T.H., & Dadds, M. (2006). Long term outcomes of an Australian universal preventative trial of anxiety and depression symptoms in child and youth: An evaluation of the Friends Program. *Journal of Clinical Child and Adolescent Psychology*, 35(3), 403-411.

This study evaluated the long-term effectiveness of the FRIENDS Program in reducing anxiety and depression in a sample of children from Grade 6 and Grade 9 in comparison to a control condition. Longitudinal data for Lock and Barrett's (2003) universal prevention trial is presented, along with data from 12-month follow-up to 24- and 36-month follow-up. Results of this study indicate that

intervention reductions in anxiety reported in Lock and Barrett were maintained for students in Grade 6, with the intervention group reporting significantly lower ratings of anxiety at long-term follow-up. A significant Time × Intervention Group × Gender Effect on Anxiety was found, with girls in the intervention group reporting significantly lower anxiety at 12-month and 24-month follow-up but not at 36-month follow-up in comparison to the control condition. Results demonstrated a prevention effect with significantly fewer high-risk students at 36-month follow-up in the intervention condition than in the control condition. Results are discussed within the context of prevention research.

2005

Selective Intervention – Community Based Clinic

Farrell, L.J., Barret, P.M., & Claassens, S. (2005). Community trial of an evidence based anxiety intervention for children and adolescents (the FRIENDS Program): A pilot study. *Behaviour Change*, 22(4), 236-248.

The aim of the current pilot study was to examine the effectiveness of the FRIENDS program (a cognitive-behavioural intervention for children and adolescents with anxiety) within a community-based clinic in Brisbane, Australia. A total of 18 children participated in the study and completed the FRIENDS program at Pathways Health and Research Centre, an innovative research-based psychology clinic for children, adolescents and families. All participants either met criteria for an anxiety disorder ($N = 11$) or were experiencing subclinical symptoms of anxiety ($N = 7$) before commencing the intervention. Before and following treatment, participants were assessed using a diagnostic interview and completed a number of self-report questionnaires. Results indicated that 73% of the participants who met criteria for an anxiety disorder before the intervention were diagnosis-free following treatment. Positive treatment effects were also found for questionnaire data, indicating that there were significant reductions on self-report levels of anxiety and depression following treatment. The outcome of this research suggests that the FRIENDS program is an effective treatment for children with anxiety, and results from this community trial replicate findings from controlled treatment trials.

Universal School-based prevention – United Kingdom

Stallard, P., Simpson, N., Carter, T., Osborn, C., & Bush, S. (2005). An evaluation of the FRIENDS programme: A cognitive behaviour therapy intervention to promote emotional resilience. *Archives of Disease in Childhood*, 90, 1016-1019.

Aims: To evaluate the efficacy and acceptability of the FRIENDS programme.

Methods: Uncontrolled before and after assessment of the FRIENDS programme, a 10 session cognitive behaviour therapy programme. A total of 213 children aged 9–10 years from six primary schools were studied. Main outcome measures: Spence Children's Anxiety Scale, Culture Free Self-Esteem Questionnaire, qualitative assessment of acceptability.

Results: End of programme data from 197 children (92.5% of eligible sample) showed significantly lower rates of anxiety ($t = 2.95$, $df = 384$) and significantly improved levels of self-esteem ($t = 3.13$, df

= 386). Significant improvements were obtained in over half of those children with the most severe emotional problems. A total of 190 children (89.2%) completed a qualitative assessment of acceptability: 154 (81%) thought it was fun, 147 (77.4%) would recommend it to a friend; 137 (72.8%) thought they had learned new skills, and 78 (41.1%) had helped someone else with their new skills.

Conclusions: The FRIENDS programme appears to be an efficacious and acceptable way to promote emotional resilience (reduced anxiety and increased self-esteem) in primary school aged children, consistent with previous studies in Australia. Further controlled studies are needed to assess natural history of anxiety and self-esteem and whether benefits are maintained over time.

Universal School-based Intervention – United Kingdom

Stallard, P., Simpson, N., Anderson, S., Carter, T., Osborne, C., & Bush, S. (2005). An evaluation of costs of the FRIENDS program: A cognitive behaviour therapy intervention to promote emotional resilience. *Unpublished manuscript*.

The objective of this study was to estimate a cost of the *FRIENDS* program when used in an uncontrolled before and after assessment design across six primary schools, covering a total of 213 children aged 9 to 10 years. The cost per child to deliver the 10-session program from NHS's perspective is £34.46 (£49.74 of proportion of start up and supervision costs included) in term 1 and reduces to £24.00 (£24.34 if proportion of supervision costs only included) in term 2.

Universal School-based Intervention – Child versus Youth

Barrett, P.M., Lock, S., Farrell, L.J. (2005). Developmental differences in universal preventive intervention for child anxiety. *Clinical Child Psychology and Psychiatry*, 10(4), 539-555.

We compared the effects of a universal school-based preventive intervention for child anxiety at two developmental stages. Six hundred and ninety-two participants enrolled in either grade 6 ($n = 293$), children aged between 9 and 10 years, or grade 9 ($n = 399$), children aged between 14 and 16 years, were allocated to either a school-based cognitive-behavioural intervention or to a monitoring group. Participants completed the Spence Child Anxiety Scale and the Child Depression Inventory and were stratified into low-, moderate- and high-risk groups based on their anxiety scores at the start of the study. The effects of the prevention programme were evaluated at post- and 12-month follow-up intervals. Post-study results indicated significant reductions in anxiety ($p < .001$) and depression ($p < .05$) across high- and moderate-risk groups in both the intervention and monitoring conditions. This trend was evident at 12-month follow-up; however, reductions in anxiety were greater in the intervention condition ($p < .05$). At post assessment, grade 6 participants showed significant changes in anxiety compared with grade 9 participants ($p < .001$), although both primary and secondary school participants showed equal reductions in anxiety at 12-month follow-up. Overall, findings suggest that universal intervention is potentially successful in reducing anxiety symptoms in children. Primary school children reported the greatest changes in anxiety symptoms, suggesting that earlier preventive intervention is potentially more advantageous than later intervention in adolescence. The implications and limitations of this study and directions for future research are discussed.

School-based Intervention – The United States

Bernstein, G.A., Layne, A.E., Egan, E.A., & Tennison, D.M., (2005). School-based interventions for anxious children. *Journal of American Academy of Child and Adolescent Psychiatry*, 44(11), 1118-1127.

Objective: To compare the effectiveness of three school-based interventions for anxious children: group cognitive-behavioral therapy (CBT) for children, group CBT for children plus parent training group, and no-treatment control. *Method:* Students (7–11 years old) in three elementary schools ($N = 453$) were screened using the Multidimensional Anxiety Scale for Children and teacher nomination. Subsequently, 101 identified children and their parents completed the Anxiety Disorders Interview Schedule for DSM-IV, Child Version. Children with features or DSM-IV diagnoses of separation anxiety disorder, generalized anxiety disorder, and/or social phobia ($n = 61$) were randomized by school to one of three conditions. Active treatments were nine weekly sessions of either group CBT or group CBT plus concurrent parent training. *Results:* Clinician-report, child-report, and parent-report measures of child anxiety demonstrated significant benefits of CBT treatments over the no-treatment control group. Effect size was 0.58 for change in composite clinician severity rating, the primary outcome measure, favoring collapsed CBT conditions compared with control. In addition, several instruments showed significantly greater improvement in child anxiety for group CBT plus parent training over group CBT alone. *Conclusions:* Both active CBT treatments were more effective than the no-treatment control condition in decreasing child anxiety symptoms and associated impairment. When parent training was combined with child group CBT, there were some additional benefits for the children.

2004

Selective School-based Intervention

Michele R. Cooley, Rhonda C. Boyd, Judy J. Grados (2004). Feasibility of an anxiety preventive intervention for community violence exposed African-American children. *The Journal of Primary Prevention*, 25(1), 105-123.

Investigated the feasibility of using an anxiety preventive intervention efficacious with Australian children with inner-city African-Americans (aged 10–11) who experienced moderate anxiety problems and community violence exposure. Of 91 fifth-grade students, ten participated in the school-based selective preventive intervention that targeted anxiety disorders. In this pilot study, qualitative and quantitative analyses revealed significant decreases in general anxiety and manifestations of anxiety that were contextually relevant to the community violence exposed youth (i.e., physiological symptoms, worry regarding environmental pressures, and concentration difficulties). The discussion focuses on the modifications necessary to make the prevention program culturally and contextually appropriate for anxious inner-city African-American children.

Selective Intervention – The United States

Cooley-Quille, M., Boyd, R.C., & Grados, J.J. (2004). Feasibility of an anxiety prevention intervention for community violence exposed children. *Journal of Primary Prevention*, 25(1), 105-123.

Investigated the feasibility of using an anxiety preventative intervention efficacious with Australian children with at-risk inner-city African Americans (aged 10–11) who experienced moderate anxiety problems and community violence exposure. Of 91 5th-grade students, 10 participated in the school-based selective intervention that targeted anxiety disorders. Pre and post-intervention analyses revealed significant decreases in general anxiety and manifestations of anxiety that were contextually relevant to the community violence–exposed youth (i.e., physiological symptoms, worry regarding environmental pressures, and concentration difficulties). The discussion focuses on the modifications necessary to make the prevention program culturally and contextually appropriate for anxious inner-city African-American children.

Social Validity Evaluation – Germany

Essau, C.A., Conradt, J., & Ederer, E.M., (2004). *Versicherungsmedizin*. Anxiety prevention among school children (article in German), 56(3), 123-130.

The FRIENDS program is a prevention and early intervention program, which teaches children strategies to cope with anxiety and challenging situations. This paper examines the social validity of the German version of the FRIENDS program using data from a large-scale study on the prevention of anxiety disorders in schoolchildren, which is funded by the Dr. Karl-Wilder Stiftung. In this paper, data of 208 schoolchildren (aged 9 to 12 years) are used. Results show that the children and their parents were highly satisfied with the FRIENDS program. Children’s attendance and completion of their homework assignments were very high. Both the children and their parents rated relaxation exercises and thinking helpful thoughts as being more useful for the children than other skills. Treatment acceptability correlated significantly with the children’s clinical outcome. The implications of our findings for future research are discussed.

2003

Universal School-based Intervention – Long Term Outcomes

Lock, S., & Barrett, P.M. (2003). A longitudinal study of developmental differences in universal preventive intervention for child anxiety. *Behaviour Change*, 20(4), 183-199.

The present paper presents the results of a longitudinal study evaluating the effects of a universal school-based intervention for child anxiety at two developmental stages. The study involved a cohort of 733 children enrolled in grade 6 ($n = 336$, 45.6%) aged between 9 and 10 years, and grade 9 ($n = 401$, 54.4%) aged between 14 and 16 years. Participants were allocated to either a school-based cognitive-behavioural intervention or to a monitoring group, and completed standardised measures of anxiety, depression and coping style. Young people identified as “at risk” of an anxiety disorder were assessed for a clinical diagnosis with a structured diagnostic interview. Findings showed universal intervention as potentially successful in reducing symptoms of anxiety and increasing coping skills in children. Primary school children reported the greatest changes in anxiety symptoms, suggesting earlier preventive intervention was potentially more advantageous than later intervention. Developmental differences in anxiety, depression and coping strategies are discussed in addition to the implications and limitations of this study and directions for future research.

Universal School-based Intervention – One-year Follow-up

Lowry-Webster, H.M., Barrett, P.M., & Lock, S. (2003). A universal prevention trial of anxiety symptomatology during childhood: results at a 1-year follow-up. *Behaviour Change*, 20(1), 25-43.

In 2001 we evaluated a universal prevention trial of anxiety during childhood, and also examined the effects of the program on levels of depression. Participants were 594 children aged 10–13 years from seven schools in Brisbane, Australia, who were randomly assigned to an intervention or control group on a school-by-school basis. The intervention was based on the group CBT program FRIENDS (Barrett, Lowry-Webster & Holmes, 1999a, 1999b, 1999c). Results were examined universally (for all children) and for children who scored above the clinical cut-off for anxiety at pre-test. At 12-month follow-up, intervention gains were maintained, as measured by self-reports and diagnostic interviews. Eighty-five per cent of children in the intervention group who were scoring above the clinical cut-off for anxiety and depression were diagnosis free in the intervention condition, compared to only 31.2% of children in the control group. Implications of these findings are examined, alongside limitations and directions for future research.

Universal Prevention with Children in Australia of Former-Yugoslavian, Chinese, and Mixed-ethnic Backgrounds Six-month Follow-up

Barrett, P.M., Sonderegger, R., & Xenos, S. (2003). Using FRIENDS to combat anxiety and adjustment problems among young migrants to Australia: A National trial. *Clinical Child Psychology and Psychiatry*, 8(2), 241-260.

The primary objectives of this study were: (i) to evaluate the capacity of a well validated anxiety prevention and emotional resiliency program (FRIENDS) to reduce psychological distress in young culturally diverse migrants of non-English speaking background (NESB), and (ii) to determine whether any change in psychological symptoms and emotional resilience would be maintained over time. Three hundred and twenty-four students differentiated by cultural origin (former- Yugoslavian, Chinese, and mixed-ethnic) and educational level (elementary and high school), were recruited from different Australian states and allocated to either an intervention or wait-list condition. All students completed standardized measures of self-esteem, internalizing symptoms, and future outlook both before and after a 10-week FRIENDS intervention or wait period. One hundred and thirty-nine participants from Queensland were also assessed six months following completion of the FRIENDS program to determine its long-term effects. Consistent with previous trials involving culturally diverse populations, NESB participants who underwent FRIENDS training exhibited significantly greater self-esteem, fewer internalizing symptoms, and a less pessimistic future outlook than wait-list participants at both post- and six months follow-up assessment intervals. This study provides empirical evidence for the utility of the FRIENDS program as a resource for therapists and schools working with young culturally diverse migrant populations.

Universal School-based Intervention – Germany

Conradt, U.J., & Essau, C.A. (2003). Feasibility and efficacy of the FRIENDS program for the prevention of anxiety in children. Paper presented at the 24th International Conference: Stress and Anxiety Research Society, Lisbon.

The *FRIENDS* program, originally developed in Australia, is a universal, school based intervention designed to prevent the onset of anxiety and depression among children through the building of emotional resilience. The main aims of the present study were (a) to examine the feasibility of the *FRIENDS* program as a universal school-based prevention trial in Germany and (b) to examine the efficacy of the *FRIENDS* for Life program in reducing anxiety symptoms. A total of 200 primary-school children, age of 9 to 12 years, participated in the 10-session group training. Parents of these children also participated in a 4-session group training for parents. These children were compared with 200 matched controls. Assessments were completed before and after the program and at 6 and 12-month follow-up. Results showed the *FRIENDS* program to be well-accepted and well-liked by children, their parents and the *FRIENDS* trainers. No specific problems were encountered in using Australian based animals (e.g., koala). As for the efficacy of the *FRIENDS* program, a pre post assessment showed reduction of anxiety symptoms among children in the prevention group, as measured using the Spence Children's Anxiety Scale. Children who participated in the *FRIENDS* program were more socially competent and used more positive coping strategies at the end of the training compared to children in the control group. To conclude, this study provided support for the feasibility and efficacy of the *FRIENDS* program in children in Germany.

Universal School-based Prevention – Canada

VP3: Vancouver Primary Prevention Project (Anxiety disorders prevention in school children). Commenced 2003. Lyn Miller, University of British Columbia and Maureen Whittal, University of British Columbia Hospital. Jane Garland, British Columbia's Children's Hospital and Sandra Clark, British Columbia Children's Hospital.

Will ascertain the efficacy of a brief cognitive-behavioural treatment program (*FRIENDS*) delivered by school personnel, and determine the stability of treatment effects. The study will also establish if parental involvement improves efficacy and/or longevity of treatment gains. The primary goal is to reduce anxiety-disordered behaviour and thinking patterns in West Vancouver public-school children. The 10 West Vancouver elementary schools (District 45) will screen all grade 4 children for

anxiety using the Multidimensional Anxiety Screen for Children (MASC), and Achenbach's Child Behaviour Checklist (CBCL) to identify children with symptoms of anxiety. All children will be randomly assigned to one of two treatment conditions in the late spring: cognitive behaviour therapy (CBT) or an attention control procedure (storytelling). Treatment will be delivered in intact classrooms of children over 10 weekly 1-hour sessions at the school site. A trained school staff member and a trained counselling or psychology graduate student will co-lead groups. Students

who were originally assigned to the control procedure will subsequently receive the active treatment (CBT) in the early fall, forming a delayed treatment group. The effect of parental involvement in treatment will be studied. Parents of children in treatment will be randomly assigned to either the experimental condition (three 2-hour educational sessions concurrent with child treatment designed to give information on anxiety disorders and the parents' role in helping to maintain healthy behaviour) or to a control condition involving a 1-hour overview of the treatment program. Year 2 will feature evaluation of all children at follow-up.

2002

Pilot School-based Study – United Kingdom

Taylor, V.M., & Stanley, A. (2002). Promoting children's mental health within educational settings: A case-study using the FRIENDS programme.

Anxiety is one of the most prevalent mental-health disorders experienced by school aged children. This article describes a case study which examines the effectiveness of using *FRIENDS*, an Australian school-based anxiety-prevention program, with a small group of at-risk junior-school children. A pre-experimental design was used and comparison between pre and posttest questionnaire scores indicated a significant reduction in self-reported anxiety scores. The evidence suggests that schools in the United Kingdom may be effective vehicles for universal early intervention and prevention of childhood anxiety problems and for promoting the mental health of all children.

2001

Universal School-based Intervention

Lowry-Webster, H.M., Barrett, P.M., & Dadds, M.R. (2001). A universal prevention trial of anxiety and depressive symptomatology in childhood: Preliminary data from an Australian study. *Behaviour Change*, 18(1), 36-50.

This paper describes the development and preliminary findings of a program designed to prevent the development of anxiety and depressive symptoms in children aged 10 to 13 years. Using a universal prevention approach, a total of 594 children were randomly assigned on a class-by-class basis to either a 10-session family group CBT program (*FRIENDS*) routinely implemented as part of the school curriculum, or to a comparison group. Pre-post intervention changes were examined universally, and for children who scored above the clinical cut-off for anxiety at pre-test. Results revealed that children in the *FRIENDS* intervention group reported fewer anxiety symptoms, regardless of their risk status, than the comparison group at post-test. In terms of reported levels of depression, only the high anxiety group who completed the *FRIENDS* intervention evidenced improvements at post-test. Overall, these preliminary results appear to support the benefits of a school-based universal cognitive behavioural intervention program. Implications of this study are discussed, and long-term follow-up measures are currently underway.

Individual and Group-based Intervention

Dadds, M.R., Barrett, P.M. (2001). Practitioner review: Psychological management of anxiety disorders in childhood. *Journal of Child Psychology and Psychiatry*, 42(8), 999-1011.

Many anxiety problems begin in childhood and are a common form of psychological problem that can be highly distressing and associated with a range of social impairments. Thus, skills for conceptualising, assessing, and treating childhood anxiety problems should be in the repertoire of all child mental health specialists. This paper reviews psychosocial treatments for the most common anxiety disorders in children and adolescents. Developmental models of anxiety disorders emphasise maximum risk in children with shy or inhibited temperaments who are exposed to high family

anxiety and avoidance, and/or acutely distressing experiences. As children mature these temperamental and environmental experiences are internalised to low self-competence and high threat expectancy. Both individual or group-based intervention utilising cognitive-behavioural strategies to address multiple risk factors are highly efficacious and family involvement can contribute positive outcomes. Guidelines for assessment and treatment are presented, and suggestions are made for effectively managing clinical process.

Group Treatment

Shortt, A.L., Barrett, P.M., & Fox, T.S. (2001). Evaluating the FRIENDS program: A cognitive-behavioral group treatment for anxious children and their parents. *Journal of Clinical Child Psychology, 30*(4), 525-535.

Conducted the 1st randomized clinical trial evaluating the efficacy of the FRIENDS program, a family-based group cognitive-behavioral treatment (FGCBT) for anxious children. Children (n = 71) ranging from 6 to 10 years of age who fulfilled diagnostic criteria for separation anxiety (SAD), generalized anxiety disorder (GAD), or social phobia (SOP) were randomly allocated to FRIENDS or to a 10-week wait-list control group. The effectiveness of the intervention was evaluated at post-treatment and 12-month follow-up. Results indicated that 69% of children who completed FGCBT were diagnosis-free, compared to 6% of children completing the wait-list condition. At 12-month follow-up, 68% of children were diagnosis-free. Beneficial treatment effects were also evident on the self-report measures completed by the children and their mothers. Parents and children reported high treatment satisfaction. Results suggest that FRIENDS is an effective treatment for clinically anxious children. Limitations of this study and directions for future research are discussed.

Social-validity Evaluation

Barrett, P.M. Short, A.L., Fox, T.L., & Wescombe, K. (2001). Examining the social validity of the FRIENDS treatment program for anxious children. *Behaviour Change, 18*(2), 63-77.

This study conducted the first evaluation of elements of social validity of the FRIENDS program, a cognitive-behavioural treatment package for childhood anxiety disorders. Parents, children, and adolescents were surveyed over time on their global satisfaction with the program, the acceptability of treatment components, and the completion of homework tasks. Results indicated a high level of satisfaction with the FRIENDS program and a high completion rate of homework tasks. Contrary to expectations, children rated the cognitive skills as more useful than adolescents did. Adolescents reported the behavioural strategy of graded exposure as more useful than other strategies. In addition, the relationship between treatment acceptability and clinical outcome was not significant. Limitations of the study and directions for further research are discussed.

Family Treatment Six-year Follow-up

Barrett, P.M., Duffy, A.L., Dadds, M.R., Rapee, R.M. (2001). Cognitive-behavioral treatment of anxiety disorders in children: Long-term (6 year) follow-up. *Journal of Consulting and Clinical Psychology, 69*(1), 135-141.

Authors evaluated the long-term effectiveness of cognitive behaviour therapy (CBT) for childhood anxiety disorders. Fifty-two clients (aged 14 to 21 years) who had completed treatment an average of 6.17 years earlier were reassessed using diagnostic interviews, clinician ratings, and self and parent-report measures. Results indicated that 85.7% no longer fulfilled the diagnostic criteria for any anxiety disorder. On a majority of other measures, gains made at 12-month follow-up were maintained. Furthermore, CBT and CBT plus family management were equally effective at long-term follow-up. These findings support the long-term clinical utility of CBT in treating children and adolescents suffering from anxiety disorders.

Universal School-based Intervention – Large Scale

Hau, P. (2001). Promoting resilience in primary schools: The FRIENDS Program. Unpublished document.

An evidence-based universal mental-health promotion and prevention program, FRIENDS, was tested with 1,136 primary-school students across 29 schools in two districts (Albany and Narrogin) in the Great Southern region of Western Australia. Most schools opted to deliver the program to year 4 children, while others decided to target year 5s. Some of the smaller schools that had spilt year levels (e.g. 4 to 7) in one class were encouraged to deliver the program to the whole class, rather than only a handful of students in the 4/5 year level. FRIENDS was implemented as part of the new curriculum framework and in some schools was jointly delivered by school teachers and nurses. The school psychologist service provided teacher supervision and support sessions to teachers to ensure program integrity and professional support. Pre and post-tests were administered using the Spence Children's Anxiety Scale test. Parent programs were also conducted. Results are still to be analysed, with preliminary observations showing the schools have certainly embraced for the trial, but the number of schools wanting to be involved with the program was exceeded considerably. Already there are new schools interested in piloting the program next year. The challenge will now be to sustain the program in the Great Southern region by offering support requested by schools in future years. This project was funded by the Commonwealth Department of Health and Aged Care – The National Suicide Prevention Strategy.

Universal Prevention with Children in Australia of Former-Yugoslavian, Chinese, and Mixed-ethnic Backgrounds

Barrett, P.M., Sonderegger, R. & Sonderegger, N. (2001). Evaluation of an anxiety-prevention and positive-coping program (FRIENDS) for children and adolescents of non-English speaking background. *Behaviour Change*, 18(2), 78-91.

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.

Universal School-based Intervention – Psychologists versus Teachers

Barrett, P., & Turner, C. (2001). Prevention of anxiety symptoms in primary school children: Preliminary results from a universal school-based trial. *Journal of Clinical Psychology, 40*, 399-410.

Preliminary data are presented on the effectiveness of a universal school-based intervention for the prevention of anxiety symptoms in primary school children. A sample of 489 children (aged 10–12 years) were assigned to one of three intervention conditions: a psychologist-led preventive intervention, a teacher-led preventive intervention, or a usual care (standard curriculum) with monitoring condition. The intervention offered was the *Friends for Children* programme, a 12-session cognitive behavioural intervention, originally based upon Kendall's (1994) *Coping Cat* programme. Participants in both intervention conditions reported fewer symptoms of anxiety at post-intervention than participants in the usual care condition. These preliminary results suggest that universal programmes for childhood anxiety are promising intervention strategies that can be successfully delivered to a school-based population and integrated into the classroom curriculum.

2000

Intervention for Migrant Children in Australia

Barrett, P.M., Turner, C.M., & Sonderegger, R. (2000). Childhood anxiety in ethnic families: Current status and future directions. *Behaviour Change, 17*(3), 113-123.

Australia is a culturally diverse country with many migrant families in need of support and assistance from clinical psychologists. Yet, surveys indicate that migrants do not feel comfortable in accessing community mental health services, due to the lack of cultural sensitivity and understanding of our current practices. Despite this finding, there remains a paucity of research on migrant families, their different values and needs, and how they adjust to the Australian culture. The present article reviews research on migrant children, their characteristics, and the factors that help or hinder healthy adjustment to a new culture. This review focuses particularly on anxiety, which is not only the most common form of childhood psychopathology, but also frequently coincides with stressful life events such as migration. Our review concludes with recommendations for the development of assessment and intervention protocols, and areas of future research.

Universal Prevention with Former-Yugoslavian Refugee Children in Australia

Barrett, P.M., Moore, A.F., & Sonderegger, R. (2000). The FRIENDS program for young former-Yugoslavian refugees in Australia: A pilot study. *Behaviour Change*, 17(3), 124-133.

Young immigrants frequently experience anxiety as a consequence of the stress associated with migration. Despite being at high risk for the development of psychopathology, culturally sensitive assessment and intervention procedures for use with ethnic minority groups residing in Australia have yet to be developed and validated. The aims of the current study were to (a) investigate the level of anxiety in a sample of former-Yugoslavian teenage refugees; (b) appraise the efficacy of the FRIENDS program, a validated Anglo-Australian anxiety-prevention program, for use with this high-risk group; and (c) obtain information from both the program participants and facilitators regarding how the intervention could be modified to better meet the needs of this growing refugee population in Australia. Twenty female former-Yugoslavian youths completed standardised measures of internalising symptoms. Participants were allocated to either an intervention ($n = 9$) or a waiting list ($n = 11$) condition. In spite of the small sample size, post-assessment indicated that participants in the intervention condition reported significantly less internalising symptoms than participants in the waiting list condition. Social validity data indicated that, overall, participants were highly satisfied with the intervention. Suggestions for assessment and treatment program modifications are discussed.

Selective Intervention – The Netherlands

Muris, Peter., & Mayer, Birgit. (2000). Vroegtijdige behandeling van angststoornissen bij kinderen.[Early treatment of anxiety disorders in children]. *Gedrag & Gezondheid: Tijdschrift voor Psychologie & Gezondheid*, 28(4), 235–242.

The intervention protocol “Early treatment of anxiety disorders in children” is developed to detect and treat children at risk. The protocol consists of three stages: 1) the detection of children at risk by means of a self-report questionnaire for measuring childhood anxiety, (2) the identification of children with anxiety disorders, and (3) the cognitive-behavioural treatment of children with anxiety disorders. The protocol was tested in four primary schools in the southern part of The Netherlands. classes. Six months later, 42 children who were selected on the basis of their elevated anxiety scores were interviewed by a child psychologist using a diagnostic interview instrument to assess anxiety disorders in children. Thirty-six children (85.7%) were found to meet the full criteria for at least one of the major anxiety disorders (i.e., generalised anxiety disorder, separation anxiety disorder, social phobia, or obsessive-compulsive disorder). These children were treated with the *Coping Koala* program, a 12-session cognitive-behavioural treatment. Results showed that the program yielded clinically significant treatment effects in about 75% of the children. All children ($N = 425$) from grades 5 to 8 completed childhood anxiety questionnaires during regular

1999

Selective-intervention Prevention Two-year Follow-up

Dadds, M.R., Holland, D.E ., Laurens, K.R., Mullins, M., Barrett, P.M., & Spence, S.H. (1999). Early intervention and prevention of anxiety disorders in children: Results at 2-year follow-up. *Journal of Consulting and Clinical Psychology*, 67(1), 145-150.

The Queensland Early Intervention and Prevention of Anxiety Project evaluated a child- and family focused group intervention for preventing anxiety problems in children. This article reports on 12- and 24-month follow-up data to previously reported outcomes at post-treatment and at 6-month follow-up. A total of 1,786 7- to 14-year-olds were screened for anxiety problems using teacher nominations and children's self-report. After diagnostic interviews, 128 children were selected and assigned to either a 10-week school-based child- and parent-focused psychosocial intervention or a monitoring group. Both groups showed improvements immediately at post-intervention and at 6-month follow-up; the improvement was maintained in the intervention group only, reducing the rate of existing anxiety disorder and preventing the onset of new anxiety disorders. At 12 months, the groups converged, but the superiority of the intervention group was evident again at 2-year follow-up. Severity of pre-treatment diagnoses, gender, and parental anxiety predicted poor initial response to intervention, whereas pre-treatment severity was the only predictor of chronicity at 24 months. Overall, follow-up results show that a brief school-based intervention for children can produce durable reductions in anxiety problems.

School-based Intervention for Adolescents

Barrett, P.M., Lowry, H., & Wallis, J. (1999). Adolescent self-esteem and cognitive skills training: A school based intervention. *Journal of Child and Family Studies*, 8(2), 217-227.

We developed and evaluated a school-based psychosocial prevention program for adolescents, focusing on self-esteem, negative cognitive processes, and peer isolation. Fifty-one tenth-grade students between the ages of 13-16 were recruited and randomly allocated to one of three groups; Social Cognitive Training group (SCT), Attention Placebo Comparison Group (APC) and a Waitlist Control group (WL). A pre-post design using two types of measures: specific measures of the target skills (self-esteem, self-statements) and impact measures (quality of peer relationships, acceptability of intervention for adolescents and teachers) evaluated the effectiveness and social validity of the intervention. Multivariate Analyses of Variance showed significant improvements on measures of target skills for the SCT group in contrast to the comparison conditions on reported self-esteem, and self statements, however mixed results were found on the impact measures. While the SCT group was rated as highly acceptable and useful by both adolescents and teachers, student self report ratings of quality of peer relationships showed little change across the study period. We discussed our findings in terms of the effectiveness of group based cognitive interventions in developing adolescent self-esteem and social competence, and the ecological validity of implementing programs within naturalistic settings.

1998

Group Treatment

Barrett, P. (1998). Evaluation of cognitive-behavioral group treatments for childhood anxiety disorders. *Journal of Clinical Child Psychology*, 27(4), 459-468.

Undertook an evaluation of a cognitive-behavioral group family-based intervention for childhood anxiety disorders in Brisbane, Australia. The treatment aimed to provide children and their families with skills in the management of anxiety and avoidance, problem solving, and mutual family support. Children (n = 60) ranging from 7 to 14 years old who fulfilled diagnostic criteria for separation

anxiety, overanxious disorder, or social phobia were randomly allocated to 3 treatment conditions: group cognitive-behavioral therapy (GROUP-CBT), group cognitive-behavioral therapy plus family management (GROUP-FAM), and wait list (WL). The effectiveness of the interventions was evaluated at post-treatment and 12-month follow-up. Results indicated that across treatment conditions, 64.8% of children no longer fulfilled diagnostic criteria for an anxiety disorder in comparison with 25.2% of children on the wait list. At 12-month FU, **64.5%** of children in the GROUP-CBT group and **84.8%** of children in the GROUP-FAM group were diagnosis free. Comparisons of children receiving GROUP-CBT with those receiving GROUP-FAM on self-report measures and clinician ratings indicated marginal added benefits from GROUP-FAM treatment. Results show that CBT interventions for childhood anxiety disorders can be effectively administered in a group format.

1997

Selective-intervention Prevention

Dadds, M.R., Spence, S.H., Holland, D.E., Barrett, P.M., & Laurens, K.R. (1997). Prevention and early intervention for anxiety disorders: A controlled trial. *Journal of Consulting and Clinical Psychology, 65*(4), 627-635.

The Queensland Early Intervention and Prevention of Anxiety Project evaluated the effectiveness of a cognitive-behavioral and family-based group intervention for preventing the onset and development of anxiety problems in children. A total of 1,786 7- to 14-year-olds were screened for anxiety problems using teacher nominations and children's self-report. After recruitment and diagnostic interviews, 128 children were selected and assigned to a 10-week school-based child- and parent focused psychosocial intervention or to a monitoring group. Both groups showed improvements immediately post-intervention. At 6 months follow-up, the improvement maintained in the intervention group only, reducing the rate of existing anxiety disorder and preventing the onset of new anxiety disorders. Overall, the results showed that anxiety problems and disorders identified using child and teacher reports can be successfully targeted through an early intervention school-based program.

1996

Family Treatment

Barrett, P.M., Dadds, M.R., & Rapee, R.M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology, 4*(2), 333-342.

A family-based treatment for childhood anxiety was evaluated. Children ($n = 79$) aged 7 to 14 who fulfilled diagnostic criteria for separation anxiety, overanxious disorder, or social phobia were randomly allocated to 3 treatment conditions: cognitive-behavioral therapy (CBT), CBT plus family management (CBT + FAM), and waiting list. The effectiveness of the interventions was evaluated at post-treatment and at 6 and 12 months follow-up. The results indicated that across treatment conditions, 69.8% of the children no longer fulfilled diagnostic criteria for an anxiety disorder, compared with 26% of the waiting-list children. At the 12-month follow-up, 70.3% of the children in the CBT group and 95.6% of the children in the CBT + FAM group did not meet criteria. Comparisons

of children receiving CBT with those receiving CBT + FAM on self-report measures and clinician ratings indicated added benefits from CBT + FAM treatment. Age and gender interacted with treatment condition, with younger children and female participants responding better to the CBT + FAM condition.