Evaluating the FRIENDS programme in a Scottish setting

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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.

Keywords: FRIENDS for Life programme; anxiety; low mood; self esteem; emotional well-being

Introduction

Emotional well-being among children has become a key public health challenge nationally and internationally in the early years of the twenty-first century. A survey carried out for the Office for National Statistics (ONS) (Meltzer, Gatward, Corbin, Goodman, & Ford, 2000) reported that 10% of UK children aged five to 15 surveyed in 1999 had a "mental disorder". Mental disorders were classified into four categories in this report – emotional disorders, conduct disorders, hyperkinetic and less common disorders. The national prevalence rate for emotional disorders was reported as 4%. A more recent ONS report (Green, McGinnity, Meltzer, Ford, & Goodman, 2005) stated that 2.4% of five to 10 year olds and 4.9% of 11 to15 year olds in the UK suffer from an emotional disorder, and that the rate was higher in girls aged five to15 (4.1%) than boys (3%).

A longitudinal study found that by age 16 years 15% of children will have, at some point, displayed anxiety symptoms of a clinical level, and concurrent co-morbidity of anxiety and depression in both sexes is high (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003).

It should be noted however that sub-clinical levels of anxiety and depression are likely to be far higher than these figures indicate, and if left untreated over time may escalate to a clinical level.

The impact of anxiety and depressive disorders can be far reaching. Of children 5–15 years with an emotional disorder in the UK, 54% missed school the previous term compared with 33% of those without an emotional disorder; 17% of children with an emotional disorder had been absent for more than 16 days, compared to 4% of those emotional disorder free (Green et al., 2005). There also appears to be a link

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between high anxiety and poor school performance (Kashani & Orvashel, 1990; Ma, 1999). Emotional disorders clearly have a negative impact upon access to, and performance in, education.

There is also evidence to suggest that childhood anxiety can have implications for adult mental health. Children with anxiety disorders have been found to have an elevated risk in adulthood of anxiety disorder (Kim-Cohen et al., 2003), major depression, illicit drug dependence and failure to attend university in early adulthood – even after controlling for a range of social, family and personal factors (Woodward & Fergusson, 2001). Early interventions to address emotional disorders in childhood are therefore particularly important to prevent further problems developing in adulthood.

Access to appropriate therapeutic services is not quickly or routinely available. Ford, Goodman, and Meltzer's (2003) UK study followed up access to mental health services for those children and young people surveyed in the ONS study published in 2000. Results indicated that only 22.1% of children with diagnosed mental health difficulties received intervention in the 18 months following diagnosis. Furthermore, of those children with an emotional disorder, 53% had had no contact with mental health services, and only 17.7% had been in contact with the Child and Adolescent Mental Health Service – whilst 39% had been in contact with school to discuss the emotional disorder.

Of the therapeutic approaches available to address these disorders, the most extensively researched have been those based on Cognitive Behaviour Therapy (CBT) (Grieg, 2007). For anxiety diagnoses, CBT has received significant recognition as an effective treatment for children and adolescents (Cartwright-Hatton, Roberts, Chitsabesan, Fothergill, & Harrington, 2004).

Preventative interventions have been classified into three categories: universal, selective and indicated (Mrazek & Haggerty, 1994). Universal preventative interventions target whole populations who are not identified on the basis of being at particular risk. An example of this in an educational context would be a whole class intervention. Selective interventions are targeted at those with an increased risk of developing an emotional disorder due to biological, social or psychological risk factors. Indicated preventative interventions are intended for those who are displaying symptomology of a given condition and who may or may not meet clinical diagnostic criteria.

FRIENDS for Life

The FRIENDS for Life Programme (Barrett, 2004, 2005) was developed in Australia as a school-based cognitive behavioural intervention for children and young people. It has two versions: children (seven to 12 years) and youth (12+ years). The programme can be used on an individual, targeted group (usually six to10 pupils) or whole class basis. The 10-week programme also has two booster sessions, designed to follow approximately four weeks and 12 weeks after completion. Two parental information sessions are also conducted, one on commencing the programme and another mid-way through the programme.

The 10 sessions of the FRIENDS for Life programme cover the following: introduction and scene setting; the relationship between thoughts and feelings; learning to cope with worries, recognising emotions, relaxation, developing positive self-talk; challenging negative and unhelpful thoughts; developing problem-solving skills; coping step plans and rewarding oneself for success; building on success and the importance of practice. The final session consists of a review of the programme and a small celebration.

There is a structured manual for both the children and youth versions which specifies the goals of each session and gives advice on delivery. Every child also has a colourful workbook for personal responses and plans relating to the group and individual activities. Some exercises are completed as home activities involving other members of the child's family. There is an accredited one-day training course for all practitioners who wish to run FRIENDS groups.

Evaluation studies of the FRIENDS for Life programme

FRIENDS for Life has been seen over the last 10 years as a uniquely successful intervention (World Health Organisation, 2004). Lowry-Webster, Barrett, and Lock (2003) studied 594 young people aged 10 to 13 years who were allocated to control or intervention groups. Results indicated that, following intervention, those participating in the FRIENDS group had fewer symptoms of anxiety than those who did not participate.

Stallard, Simpson, Anderson, Hibbert, and Osborn (2007) used the programme with 106 children aged nine to10 years. Anxiety and self-esteem levels were recorded as stable for six months prior to the programme commencing. Three months after completing the FRIENDS programme, rates of anxiety had decreased and self esteem increased, both significantly.

Barrett, Farrell, Ollendick, and Dadds (2006) found that children who had undergone a FRIENDS programme demonstrated significantly greater reductions in anxiety three years later, for both a 9–10 and a 14–16 year old cohort, compared to control groups. Interestingly, they also found stronger prevention impacts at four-month follow-up than immediately after the intervention.

Furthermore, a follow-up study was conducted on 52 young people aged 14–21 years who had undertaken the FRIENDS programme approximately six years earlier. Results indicated that 85.7% no longer fulfilled diagnostic criteria for any anxiety disorder (Barrett, Duffy, Dadds, & Rapee, 2001). The FRIENDS for Life programme therefore appears to have significant research evidence to support its efficacy in reducing childhood and adolescent anxiety.

Stirling Council Educational Psychology Service received support from the Scottish Government to conduct training in FRIENDS across Scotland, to maintain a national database of FRIENDS practitioners, and to carry out research on the effectiveness of FRIENDS in the Scottish setting.

This study sought to replicate in some respects earlier work carried out in Australia and elsewhere on the impact of a FRIENDS intervention on children's levels of anxiety, low mood and self esteem. In addition the study aimed to evaluate the impact of FRIENDS upon social relationships, as this is an area upon which previous FRIENDS evaluation studies have not been focussed. An increase in social skills would be beneficial, as social isolation is a widely accepted risk factor for developing poor mental health.

Therefore this study set out to determine:

(1) Whether levels of anxiety, low mood, self esteem and social skills, when untreated, remain stable over time.

- (2) Whether the FRIENDS programme has an impact on measured levels of anxiety, low mood, self esteem and social skills immediately after completion of the programme.
- (3) Whether improvements in these measures immediately following the programme are maintained in the four months following the intervention.

To achieve this within one academic year, the programme was delivered to two cohorts of children as described later in this article.

Method

Participants

Two primary and two secondary schools were approached by the Educational Psychology Service to seek their involvement in a research project to evaluate the effectiveness of the FRIENDS for Life programme in a Scottish setting. The schools represented a mixture of urban and rural establishments. Teachers received a checklist describing the kinds of difficulties experienced by children in the target population – indicators of anxiety, low mood and low self esteem – and were asked to nominate children whom they felt might benefit from the programme. The target group could include any child from P5 to S3 – age range nine years to 14 years.

Initially 95 children were assessed for participation across the four schools; these children had been nominated by teachers and had received parental consent to participate should they be assigned to a FRIENDS group.

The criterion for inclusion in the study was one of "indicated prevention", where children were recommended for the programme because they were deemed by their teacher(s) to indicate some signs of anxiety, low mood or low self esteem, but did not necessarily meet diagnostic criteria (Mrazek & Haggerty, 1994). The number who qualified for inclusion in the study was 63; however, five secondary school children who qualified for inclusion did not participate. Reasons for not participating include the young person choosing not to take part in the programme or it being deemed that they would be unable to participate in a small group work environment.

Participants were randomly assigned to one of two groups in both primary schools and one secondary school; in the other secondary school the number of young people identified was small so only one group was formed. The combined groups formed two cohorts, in which Cohort A comprised 27 children, and Cohort B comprised 31 children. Age range on initial assessment was 8–14 years; there were 31 male and 27 female participants.

The 10 week programme was delivered in small group settings within each school. Two educational psychologists from the Educational Psychology Service facilitated each group and overall seven educational psychologists were involved in the delivery of the programme across the four schools.

Parents and carers of participating children were invited to two information sessions about the FRIENDS programme during the course of the 10 weeks.

Measures

In order for the Scottish results to be directly comparable to others' findings, the main measures used were those employed in previous studies, namely:

- Spence Children's Anxiety Scales (SCAS) (Spence, 1998) child and parent versions. The child self-report questionnaire consists of 45 questions, and the parent questionnaire consists of 39 questions. Raters evaluate statements with response options "never", "sometimes", "often" or "always". Parents rate their child's behaviour and children self-report. A total anxiety score is produced by each version, which can be broken down into six anxiety subscales of panic attack/agoraphobia, separation anxiety, physical injury fear, social phobia, obsessive compulsive and generalised/over anxious disorder.
- Children's Depression Inventory (CDI) (Kovacs, 2005) the full 27 question self-report child version was administered, with the exception that one question about suicide was removed when administered to primary school children. Respondents answer each question by choosing which one of three sentences best describes their feelings and each response has an associated score.
- Culture-free Self Esteem Questionnaire (Battle, 2002) either the adolescent or intermediate forms were completed according to age at initial assessment, which produce a Global Self Esteem measure. This self-report questionnaire requires a "yes" or "no" response to a total of 64 questions in the intermediate form and 67 in the adolescent form.
- Additionally, the Social Skills Rating System (SSRS) (Gresham & Elliot, 2006) was employed to investigate the impact of the FRIENDS programme upon social interaction. Self-report child, parent and teacher versions were completed. There are separate versions for primary and secondary pupils, which produce a standard score of social skills and are rated on a never/sometimes/often scale. Teachers and parents were asked to complete the "social skills" section of SSRS on behalf of their children.

Self-report questionnaires were administered to the children in groups prior to commencing the programme. Individual assistance was available for children with limited literacy or linguistic skills. Research personnel from the Educational Psychology Service carried out all self-report assessments; parent questionnaires were distributed and returned by post whilst teacher questionnaires were completed in school.

Children selected for the intervention satisfied the criteria for "indicated prevention" – each child self-reported in the highest range of anxiety scores from the sample, *or* the lowest mood levels, *or* reported below average in the self-esteem measure. Self-reported social skill ratings were not used as selection criteria, as the FRIENDS programme is not designed specifically to address social skills – and the main focus of the study was replication of previous research findings.

Complete self- and teacher-report data were obtained for all 58 of the children who participated in the study.

The time-scales for running the FRIENDS programme were as shown below (August through to June the following year):

August to September	Initial assessments of all children (T1)
October to January	Cohort A received the FRIENDS programme
January to February	Re-assessments of all children (T2)
February to May	Cohort B received the FRIENDS programme
May to June	Final assessments of all children (T3)

Thus it was possible to measure:

- (1) the stability of the measures when untreated, over time (cohort B acting as a waitlist group, using T1 and T2 comparisons);
- (2) the impact of the programme immediately after completion (using immediate pre and post data from both cohorts – cohort A: T1 and T2; cohort B: T2 and T3); and
- (3) the sustainability of the effects of the programme over time following intervention (cohort A, using T2 and T3 comparisons).

Due to time constraints of conducting all assessments within one academic year, there was no four-month follow-up of cohort B, and no wait period for cohort A.

Results

There were no significant differences between the primary and secondary age groups on initial assessment; similarly, there were no significant differences in initial scores between boys and girls selected for the programme. Therefore analyses were performed with these variables collapsed across each experimental measure.

The stability of the measures of anxiety, depression, self esteem and social skills, when untreated, over time

The children in cohort B received no input for a period (approximately four months) while waiting to receive the programme.

The data from their initial (T1) assessments and their pre-intervention assessments (T2) were compared on all five measures. The results are shown in Table 1.

In all tables, any improvements would be seen as a *drop* in anxiety scores, a *drop* in low mood scores, and as a *rise* in scores of self esteem and social skills. The results indicate that anxiety, low mood, self esteem and social skills scores did not change significantly in the time *before* cohort B engaged in the programme. There was a tendency for scores to move in a positive direction, albeit not significantly, during the wait period for this cohort. Teacher estimates of children's social skills did, however, show a significant increase over the wait period (p < 0.01).

The immediate impact of the FRIENDS programme on anxiety, low mood, self esteem and social skills scores

The mean scores of anxiety, low mood, self esteem and social skills from both cohorts immediately before (T1 for cohort A, T2 for cohort B) and immediately after (T2 for

Cohort B, $N = 31$	Anxiety	Low mood	Self esteem	SSRS child	SSRS teacher
T1 scores					
Mean	35.09	13.48	86.77	97.68	85.19
Standard deviation	17.37	5.18	12.00	15.48	14.34
T2 scores					
Mean	30.06	12.84	91.38	99.10	90.81
Standard deviation	14.84	7.25	14.99	16.52	14.91
<i>t</i> -Test results	Not significant	Not significant	Not significant	Not significant	Significant, p = 0.005

Table 1. C	Comparison o	of cohort B	pre-intervention	assessments mea	in scores T1 and T2.
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cohort A, T3 for cohort B) receiving the programme were compared. The results are shown in Table 2.

Anxiety measures

The scores suggest that completing the programme had an immediate effect on the anxiety levels of the children. There was a mean decrease of six points in the SCAS score, which was statistically significant (p < 0.01). A separate analysis revealed that the improvement was seen mainly in three of the six anxiety subscales: panic attack and agoraphobia, separation anxiety and obsessive-compulsive.

Low mood, self esteem and social skills measures

The same immediately pre and post comparisons of the combined cohorts were made with the measures of self-reported low mood (CDI), self esteem (Culture Free Self Esteem [CFSE]) and social skills (SSRS), and also the teacher and parent measures of social skills (SSRS [teacher] and SSRS [parent] respectively). The results following administration of the FRIENDS programme indicate an immediate and statistically significant impact on the children's general well-being; low mood scores improved by almost four points (p < 0.01); there were also significant gains in self esteem (p < 0.01) and in self-ratings of social skills (p < 0.05). Teachers also noted a highly significant improvement in children's social skills immediately after FRIENDS (p < 0.01).

There were insufficient parental SSRS returns to allow a complete analysis for T1, T2 and T3. However, 80% of parents returned a questionnaire during the time before, and a questionnaire during the time after the intervention. Analysis of these returned SSRS parent version questionnaires showed that parents reported a significant improvement in their child's social skills after participation in the FRIENDS programme (p < 0.05).

Unfortunately, there were not sufficient responses from the SCAS parent version to complete any analysis.

The sustainability of any improvements over time

In order to establish whether anxiety, low mood and self esteem and social skills continued to move in a positive direction in the period following intervention, the scores of children in cohort A four months after completing the programme (T3) were compared with their initial (T1) scores and their scores immediately after the programme (T2). In statistical terms, this was achieved using a two-step process: a one-way analysis of variance (ANOVA) (repeated measures) is performed, to establish whether there is any overall significance in the three sets of results, followed by comparing the results in pairs, using the Bonferroni test, which makes adjustments for multiple comparisons. The results are shown in Table 3.

The analysis produced significant within-subjects effects in all measures between the assessment periods. This suggested that analysis of pairwise comparisons of T1–T2, T2–T3 and T1–T3 changes should be undertaken in relation to each measure.

Anxiety measures

Comparisons of the three sets of anxiety scores of cohort A were examined using Bonferroni pairwise comparisons. The results are shown in Table 4.

Table 2. Comparison of pre- and post-FRIENDS SCAS, CDI, CFSE and SSRS scores for entire group.	e- and post-FRIENDS S	CAS, CDI, CFSE ai	nd SSRS scores for e	ntire group.		
Cohorts A and B, $N = 58$	Total SCAS score	CDI score	CFSE score	SSRS (child)	SSRS (teacher)	SSRS (parent)
Pre-programme scores Mean	32.59	14.10	87.38	97.71	91.08	(based on 80% return) 88.25
Standard deviation	16.71	8.23	15.41	17.04	13.50	17.25
Post-programme scores Mean	26.59	10.17	93.01	101.7931	98.32	93.30
Standard deviation	12.75	7.69	16.74	19.38	13.22	17.53
<i>t</i> -Test results	Significant, $p = 0.0036$	Significant, $p = 0.00047$	Significant, $p = 0.0041$	Significant, $p = 0.045$	Significant, $p < 0.0001$	Significant, $p = 0.010$

1adie 3. AINUVA IE	peated measures of conor	1able 5. AINUVA repeated measures of conort A assessment scores at 11, 12 and 15.	1, 12 and 13.		
N = 27	Anxiety	Low mood	Self esteem	SSRS (child)	SSRS (teacher)
TI scores					
Mean	35.48	15.56	82.78	96.11	91.41
Standard deviation	18.48	9.16	14.82	17.80	11.95
T2 scores					
Mean	26.48	10.81	90.78	105.44	99.29
Standard deviation	13.15	8.00	16.44	20.44	11.84
T3 scores					
Mean	22.63	8.85	94.18	101.71	100.11
Standard deviation	15.33	7.18	15.84	20.08	13.51
ANOVA results	Significant, F = 13.387, p = 0.01	Significant, F = 11.773, p = 0.002	Significant, F = 17.332, p = 0.0001	Significant, F = 6.374, p = 0.018	Significant, F = 20.520, p = 0.0001

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<i>N</i> = 27	Anxiety T1 and anxiety T2	Anxiety T2 and anxiety T3	Anxiety T1 and anxiety T3
Mean difference	9.000	3.852	12.852
Standard error	3.296	2.713	3.513
Significance	Significant, $p = 0.034$	Not significant	Significant, $p = 0.003$

Table 4. Pairwise comparisons of cohort A SCAS scores.

There was a significant decrease in anxiety as measured by the SCAS (p < 0.05) immediately following the programme, as was the case with the combined cohorts earlier. There was a further mean decrease in anxiety of almost four points at fourmonth follow-up. This did not in itself constitute a statistically significant change from T2, although it did raise markedly the significance of the improvement overall; the change from T1 to T3 was almost 13 points and is statistically significant (p < 0.01).

Low mood measures

As the ANOVA comparing CDI scores at T1, T2 and T3 was significant, pairwise comparisons were examined. The results are shown in Table 5.

A similar pattern of change is observed; a statistically significant mean drop of 4.74 between T1 and T2 (p < 0.05) is followed by a smaller, non-significant drop, contributing to a more significant change overall between T1 and T3 (p < 0.01).

Self-esteem measures

Following the significant ANOVA finding for self esteem, pairwise comparisons for T1, T2 and T3 were conducted on the CFSE data. These are shown in Table 6.

The Bonferroni comparison test again indicates that whilst there is not a significant rise in self-esteem scores between T2 and T3, there is a significant overall change of over 11 points over the extended period from initial T1 score to T3 (p < 0.01).

Table 5. Pairwise comparisons of cohort A CDI scores.

N = 27	Low mood T1 and low mood T2	Low mood T2 and low mood T3	Low mood T1 and low mood T3
Mean difference	4.741	1.963	6.704
Standard error	1.675	1.234	1.954
Significance	Significant, $p = 0.027$	Not significant	Significant, $p = 0.006$

Table 6.	Pairwise	comparisons	of cohort A	CFSE scores.
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N = 27	Self esteem T1 and self esteem T2	Self esteem T2 and self esteem T3	Self esteem T1 and self esteem T3
Mean difference	8.000	3.407	11.407
Standard error	2.997	1.758	2.740
Significance	Significant, $p = 0.039$	Not Significant	Significant, $p = 0.001$

N = 27	SSRS (child) T1 and SSRS (child) T2	SSRS (child) T2 and SSRS (child) T3	SSRS (child) T1 and SSRS (child) T3
Mean difference	9.333	-3.741	5.593
Standard error	2.561	1.531	2.215
Significance	Significant, $p = 0.004$	Not significant	Not significant

Table 7. Pairwise comparisons of cohort A SSRS (child) scores.

Table 8. Pairwise comparisons of cohort A SSRS (teacher) scores.

N = 27	SSRS (teacher) T1 and SSRS (teacher) T2	SSRS (teacher) T2 and SSRS (teacher) T3	SSRS (teacher) T1 and SSRS (teacher) T3
Mean difference	7.889	0.815	8.704
Standard error	1.858	1.834	1.921
Significance	Significant, $p = 0.001$	Not significant	Significant, $p = 0.0001$

Social skills – child self-report

The data on cohort A's self-reported social skills produced a significant ANOVA result. The follow-up pairwise comparisons for T1, T2 and T3 are shown in Table 7.

This finding represents a change from the pattern of previous results; having risen by over nine points on average immediately after the programme, scores on the SSRS fell in the four months after; whilst the programme seemed to have an immediate impact on this measure, the overall (T1–T3) effect became non-significant at fourmonth follow-up.

Social skills – teacher report

The ANOVA completed on SSRS (teacher) scores indicated significant overall changes in the children's social skills as observed by their teachers. This result was followed up by looking at pairwise comparisons for T1, T2 and T3 as shown in Table 8.

The pattern of change here reverts to that observed in three of the four previous results. The significant improvement observed by teachers immediately after the programme is followed by a non-significant change in the four months after; overall there is a highly significant improvement (p < 0.01) between T1 and T3.

Discussion

Anxiety and low mood are increasingly prevalent in the school population and can damage educational and life prospects. Successful interventions in a school setting can help restore emotional balance and prevent later difficulties. The FRIENDS programme offers children strategies to avoid unhelpful negative thinking and to take positive steps towards addressing anxiety provoking issues. The indications from this study are that it achieves considerable success with children in the age range nine to 14 years. Self esteem is also a critical resilience factor influencing children's ability to cope with social and school challenges, personal, curricular and developmental; the programme's positive impact on self esteem is a very positive finding.

Impact of the programme

These results suggest that an indicated prevention school-based programme can have a significant positive impact upon the emotional well-being of children, as measured by self-reported levels of anxiety, low mood, self esteem and social skills, and teacher and parent reported social skills. Self-report measures showed no significant changes in the four months prior to intervention, but were all observed to improve significantly immediately following the programme, and apart from self-reported social skills, to continue to improve in the four months afterwards.

Anxiety

Data reported in the SCAS instructions (Spence, 1998) suggest that a score on the SCAS of 42.48 or above indicates a clinical level of anxiety (although it should be noted that this self-report measure is not intended for use as a diagnostic tool). The mean score of the group immediately on commencing FRIENDS was already below this clinical cut off, therefore supporting the indicated approach taken.

A closer analysis of the SCAS subscales revealed that there were significant decreases in panic attack, separation anxiety and obsessive compulsive anxiety levels following the FRIENDS programme. Of all anxiety subtypes, panic disorders have been shown to have the highest continuity from childhood into adolescence – Costello et al. (2003) reported that 45.5% of those adolescents diagnosed with panic disorder had previously been given the same diagnosis. Therefore interventions such as FRIENDS which successfully lower panic attack anxiety are particularly important in reducing subsequent anxiety in later years.

The significant, sustained drop in self-reported SCAS total score resulting from FRIENDS offers additional support for its effectiveness as a preventative, indicated intervention to tackle childhood anxiety.

Low mood

Normative data reported in the CDI manual across genders indicate that a score of 9.81 in 7–12 year olds and 10.49 in 13–17 year olds is considered average (Kovacs, 2005). The mean CDI score of the group immediately prior to commencing the FRIENDS programme was 14.10 which dropped significantly to 10.17 immediately after the 10 week programme ceased. In effect, the score moved to within the average range following the FRIENDS programme, and this was sustained at the four-month follow-up.

The apparent ability of the programme to improve low mood and "normalise" negative feelings and thoughts has clear and positive implications for the broader population.

Self esteem

The CFSE inventory manual reports that a self esteem quotient of 80–89 is below average whilst a score in the range 90–110 is within average parameters (Battle, 2002). The mean CFSE score of the children immediately prior to FRIENDS fell within the "below average" range at 87.38 and increased to 93.01 immediately following the programme and into the "average" descriptor range. Additionally, this was

sustained in the four months following completion of FRIENDS. Again, this is a very positive finding in terms of the programme's potential impact on children's confidence to gain more from their educational and life experiences.

Social skills

Although self-reported social skills did increase significantly immediately after the programme, these gains were not maintained at four-month follow-up. Interestingly whilst teachers reported a significant improvement in social skills during the wait period, they also noted further significant improvement immediately after the programme which was maintained at follow-up.

There could be a number of explanations for this lack of maintenance in social skills gains reported by children. Intervention groups were constructed by combining children from a number of classes. Therefore, whilst self-reported social skills did increase initially it is possible that these increases were in relation to the FRIENDS group specifically, and that the children felt it difficult to maintain this thereafter within their own classroom settings. It seems likely that if the groups were run with whole classes, the language of the FRIENDS programme and concepts taught would be reinforced more often. This may support self-recognised maintenance of improved social skills learned from the programme. It is, however, encouraging to note that although children did not report maintenance of social skills after four months, their teachers did. This aspect merits further investigation.

Other findings

Changes during the waitlist period

The results indicate that anxiety, low mood and self esteem scores did not change significantly during the wait period, although there was a tendency for scores to move in a positive direction. Stallard et al. (2007) had very similar findings for a six-month period prior to intervention.

The significant increase in teachers' ratings of social skills over the wait period may be a reflection of their interest in the programme and anticipation of its use with this cohort in the near future. The initial assessment period occurred shortly after the first term commenced, therefore the significant increase in social skills scores during the wait period may simply be due to teachers' increased contact with pupils over time, giving more opportunity to observe positive social skills behaviour. Seeking feedback from secondary pupils' subject teachers instead of form teacher may have provided a better indication of improvement in social skills as many form teachers felt that form class did not provide the opportunity to observe specific social interactions.

Delivery of the programme by schools

Given that 36.9% of those children with an emotional disorder in Ford et al.'s (2003) British study had been in contact with school regarding their emotional disorder, school would seem an appropriate and accessible vehicle for delivering preventative interventions to children who may be at risk of experiencing emotional difficulties. Whilst in this particular study the FRIENDS programme was delivered by educational psychologists, there is evidence supporting its efficacy when delivered by non-mental health professionals such as teachers and school nurses (Barrett & Turner, 2001; Stallard et al., 2007). The delivery of the programme by teachers will encourage awareness of the importance of promoting positive mental health within school communities and will build upon the supportive environment which schools offer.

Additionally, provided there are appropriate onward referral mechanisms for children and adolescents who continue to show worrying levels of anxiety or low mood, FRIENDS for Life appears to be an excellent first line intervention, suitable for delivery by teachers, to reduce anxiety and low mood levels and promote positive self esteem within their classes.

Conclusion

This study has explored the impact of the FRIENDS for Life programme using an indicated approach and was carried out by Stirling Council Educational Psychology Service. The study confirms that the positive, sustained gains in children's emotional well-being reported in international studies are also clearly observed in a Scottish setting. It is now part of an increasing body of evidence in this country of the effectiveness of FRIENDS for Life as a school-based approach which can improve emotional well-being (MacDonald & Rees, 2008; Smiley & Stalker, 2008). This is a strong indication that the FRIENDS for Life programme could make a significant contribution to the Scottish Government's overall strategy for improving educational outcomes and emotional well-being in school children.

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Further information about FRIENDS for Life and links to other relevant websites can be found at: http://www.friendsforlifescotland.org.

References

- Barrett, P.M. (2004). FRIENDS for Life! for children. Participant workbook and leader's manual. Brisbane: Australian Academic Press.
- Barrett, P.M. (2005). FRIENDS for Life! for youth. Participant workbook and leader's manual. Brisbane: Australian Academic Press.
- Barrett, P.M., Duffy, A.L., Dadds, M., & Rapee, R. M. (2001). Cognitive-behavioural treatment for anxiety disorders in children: Long term (6 year) follow-up. *Journal of Consulting and Clinical Psychology*, 69(1), 135–141.
- Barrett. P.M., Farrell, L.J., Ollendick, T.H., & Dadds, M. (2006). Long-term outcomes of an Australian universal prevention trial of anxiety and depression symptoms in children and youth: An evaluation of the FRIENDS programme. *Journal of Clinical Child and Adolescent Psychology*, 35, 3.
- Barrett, P.M., & Turner, C.M. (2001). Prevention of anxiety symptoms in primary school children: Preliminary results from a universal school based trial. *British Journal of Clinical Psychology*, 40, 399–410.
- Battle, J. (2002). Culture-free self esteem inventories (3rd ed.). Austin, TX: PRO-ED Inc.

- Cartwright-Hatton, S., Roberts, C., Chitsabesan, P., Fothergill, C., & Harrington, R. (2004). Systematic review of the efficacy of cognitive behaviour therapies for childhood and adolescent anxiety disorders. *British Journal of Clinical Psychology*, 43, 421–436.
- Costello, E.J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry*, 60(8), 837–844.
- Ford, T., Goodman, R., & Meltzer, M. (2003). Service use over 18 months among a nationally representative sample of British children with psychiatric disorder. *Clinical Child Psychology and Psychiatry*, 8(1), 37–51.
- Green, H., McGinnity, A., Meltzer, H., Ford, T., & Goodman, R. (2005). Mental health of children and young people in Great Britain, 2004. Houndmills: Office of National Statistics, Palgrave Macmillan.
- Gresham, F., & Elliot, S. (2006). *Social skills rating system*. Bloomington, MN: NCS Pearson Inc.
- Grieg, A. (2007). A framework for the delivery of cognitive behavioural therapy in the educational psychology context. *Educational and Child Psychology*, 24(1), 19–35.
- Kashani, J.H., & Orvashel, H. (1990). A community study of anxiety in children and adolescents. *The American Journal of Psychiatry*, 147, 313–318.
- Kim-Cohen, J., Caspi, A., Moffitt, T.E., Harrington, H., Milne, B. J., & Poulton, R. (2003). Prior juvenile diagnosis in adults with mental disorder: Developmental follow-back of a prospective-longitudinal cohort. *Archives of General Psychiatry*, 60, 709–717.
- Kovacs, M. (2005). *Children's depression inventory*. Lutz, FL: Psychological Assessment Resources Inc.
- Lowry-Webster, H., Barrett, P., & Lock, S. (2003). A universal prevention trial of anxiety symptomatology during childhood: Results at one-year follow-up. *Behaviour Change*, 20(1), 25–43.
- Ma, Y. (1999). A meta-analysis of the relationship between anxiety toward mathematics and achievement in mathematics. *Journal for Research in Mathematics Education*, 30, 520–540.
- MacDonald, A., & Rees, K. (2008). The FRIENDS for Life programme: An evaluation of the implementation of FRIENDS for Life in Inverclyde (unpublished). Port Glasgow: Inverclyde Psychological Service.
- Meltzer, H., Gatward, R., Corbin, T., Goodman, R., & Ford, T. (2000). *The mental health of children and adolescents in Britain*. London: The Stationery Office.
- Mrazek, P.J., & Haggerty, R.J. (1994) Reducing risks for mental disorders: Frontiers for preventive intervention research. Washington, DC: National Academy Press.
- Smiley, N., & Stalker, G. (2008). An evaluation of the "FRIENDS for Life" programme within a Scottish context. In *The effectiveness of CBT approaches in educational settings* (pp. 104–129). Edinburgh: Scottish Government – Professional Development Programme for Educational Psychologists.
- Spence, S.H. (1998). A measure of anxiety symptoms among children. Behaviour Research and Therapy, 36(5), 545–566.
- Stallard, P., Simpson, N., Anderson, S., Hibbert, S., & Osborn, C. (2007). The FRIENDS emotional health programme: Initial findings from a school-based project. *Child and Adolescent Mental Health*, 12(1), 32–37.
- Woodward, L., & Fergusson, D. (2001). Life course outcomes of young people with anxiety disorders in adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(9), 1086–1093.
- World Health Organisation. (2004). Prevention of mental disorders: Effective interventions and policy options. Geneva: World Health Organisation.