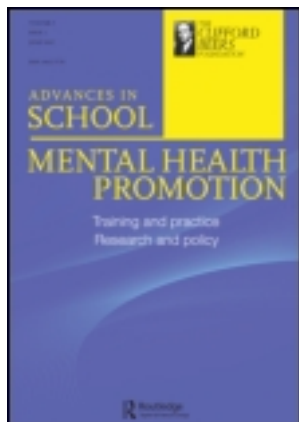


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## School-based prevention of anxiety and depression: a pilot study in Sweden

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Anxiety disorders are the most prevalent form of psychopathology in children. Anxiety disorders often begin early in life, involve great suffering, and predict psychiatric problems. Unfortunately, only a few children with anxiety disorders will receive effective treatment. The purpose of this study was to examine the effectiveness of *FRIENDS for Life*, an Australian school-based prevention programme, with children from Sweden. Participants were 50 children, and the impact of the programme was measured at three time points on the outcomes of anxiety, depression, and general mental health. Results showed a decrease in depressive symptoms and difficulties, and an increase in strengths, for those children receiving the programme. For those children at risk for anxiety receiving the programme, the results also showed a decrease in anxiety symptoms. Overall, the study suggests that *FRIENDS for Life* could be a promising intervention for Swedish children.

**Keywords:** prevention; anxiety; depression; primary school children

### Introduction

Experiencing some anxiety is part of the normal human development. However, when anxiety occurs in response to an unreasonable perception of threat and at a disproportionate intensity, it becomes a problem (Dadds & Barrett, 2001). In this way, anxiety ceases to be adaptive, resulting in functional impairment and interfering with aspects of everyday life (Bittner et al., 2007). Anxiety disorders are the most prevalent form of psychopathology in children (Neil & Christensen, 2009). The risk that a child at some point between age 9 and 16 meets criteria for an anxiety disorder is about 10% (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003). The onset of anxiety often begins early in life; Kessler et al.'s (2005) study found that half of the adults with anxiety disorders reported an age of onset before 11 years. Anxiety disorders, if untreated, have a chronic course, and are associated with depression, substance abuse, and higher rates of school drop-out and unemployment later in life (Bittner et al., 2007; Donovan & Spence, 2000; The Swedish National Council on Technology Assessment, 2005). In addition to the personal suffering by children and their families, anxiety disorders produce a high economic cost to society. In the USA, anxiety disorders are estimated to account for one-third of the total costs of mental health (Dupont et al., 1996). Therefore, prevention and early intervention programmes are crucial.

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Prevention is particularly important as research has shown that only one in about five children with anxiety disorders will receive treatment (Essau, 2005). Additionally, treatment seeking occurs with a delay of 6–14 years after the onset (Kessler, Olfson, & Berglund, 1998). Furthermore, as reported in a meta-analysis, treatment does not always work for every child; there is a range of 21–75% of participants that still meet the criteria for anxiety disorders after the treatment (Silverman, Pina, & Viswesvaran, 2008).

The school is an ideal access point to provide effective interventions to a large number of children before a disorder is expressed or expressed in full scale (National Research Council & Institute of Medicine, 2009). The goal of prevention in mental health is to reduce the impact of risk factors and to strengthen the protective factors involved in the development of mental disorders (Coie et al., 1993). Particularly for anxiety and depression prevention, universal school-based research has increased over the past decade reporting promising results (Donovan & Spence, 2000; Gladstone & Beardslee, 2009; National Research Council & Institute of Medicine, 2009; Neil & Christensen, 2009). Several programmes have been researched. One of the most evaluated programmes is the *FRIENDS for Life* programme (Barrett, 2004a; Barrett, 2004b), a brief cognitive-behavioural intervention. Strong support for the efficacy of the *FRIENDS for Life* programme has been recognized in several reviews (Briesch, Hagermoser Sanetti, & Briech, 2010; Fisak, Richard, & Mann, 2011; Neil & Christensen, 2009).

Barrett and Turner (2001) conducted the first study, evaluating the *FRIENDS for Life* programme as a universal intervention with 489 children aged 10–12 years. Results showed that those children receiving the programme reported a reduction in anxiety symptoms, and those who were at risk for anxiety also reported a reduction in depressive symptoms. Subsequent studies conducted in Australia have reported similar findings (e.g. Lock & Barrett, 2003; Lowry-Webster, Barrett, & Dadds, 2001), with gains maintained at three-year follow-up (Barrett, Farrell, Ollendick, & Dadds, 2006; Lowry-Webster, Barrett, & Lock, 2003). Research has also been conducted in other countries outside Australia.

Stallard et al. (2005) evaluated the programme implemented by school nurses in the UK. Participants were 213 children aged 9–10 years, who after completing the programme reported significant reductions in anxiety and an increase in self-esteem. This study was replicated finding similar results that were maintained at one-year follow-up (Stallard, Simpson, Anderson, Hibbert, & Osborn, 2007). Essau, Conradt, and Ederer (2004) conducted a study with 200 German primary school children and the findings showed significant reductions in anxiety symptoms and high levels of satisfaction with the programme. Mostert and Loxton (2008) conducted a study with 12-year-old children from South Africa and found a significant reduction in anxiety for those receiving the programme. The programme has also been evaluated with Mexican primary school-aged children, and the results showed positive outcomes for those receiving the programme such as a reduction in depressive symptoms and risk, and an increase in proactive coping skills (Gallegos, Linan-Thompson, & Stark, 2010).

On the basis of reports of increased mental illness among young people in Sweden (The National Board of Health & Welfare, 2009), there has become a priority to evaluate prevention programmes such as the *FRIENDS for Life* to prevent anxiety disorders in Swedish children (The Swedish National Council on Technology Assessment, 2010). The present study is the first that evaluates the effectiveness of the Swedish version of the *FRIENDS for Life* programme for reducing and preventing anxiety and depressive symptoms, and for increasing the general mental health in Swedish primary school children.

Three research questions guided this study: (1) What is the effect of the *FRIENDS for Life* programme regarding anxiety symptoms of children? It was hypothesized that the children would report a decrease in their anxiety symptoms after receiving the programme. (2) What is the effect of the *FRIENDS for Life* programme regarding depressive symptoms of children? It was hypothesized that children would report a decrease in their depressive symptoms after receiving the programme. (3) What is the effect of the *FRIENDS for Life* programme on children's general mental health as rated by their classroom teachers? It was hypothesized that teachers would report an increase in children's general mental health after receiving the programme.

## Method

### Design

A one-group pre-test–post-test design using a double pre-test was used to address the research questions. Assessment time points were as follows: Time 1 (T1) was conducted nine weeks before the intervention, Time 2 (T2) was conducted one week before the intervention, and Time 3 (T3) was conducted after the completion of the 10-week intervention. No intervention was conducted between T1 and T2, thus serving as a control condition. The independent variable was the intervention of Swedish version of the *FRIENDS for Life* programme, and the dependent variables were children's self-reported anxiety and depressive symptoms, and children's general mental health as rated by teachers.

### Participants

Children in the study attended a school in a suburb located in Stockholm. The school was an ordinary primary school teaching from kindergarten to Grade 5 of primary school. Children in this study were attending three classrooms from Grades 2 and 3. Parental written consent was obtained for the participants in this study. A total of 67 children were asked to participate in the study. Of these, the parents of 51 children (76%) gave their written consent, the parents of 2 children (3%) denied their consent, and the parents of the remaining 14 children (21%) did not answer before the first assessment time point; therefore, they were not included in the study. One child changed schools after the first assessment time point. The sample included 50 children aged 8–10 years (mean age 9.0 years,  $SD = 0.6$ ), 26 were girls (52%) and 24 were boys (48%), and their three classroom teachers.

### Measures

The following three measures were used to assess children's anxiety and depressive symptoms, and children's general mental health. The Spence Children's Anxiety Scale (SCAS) and the Children's Depression Inventory (CDI) were administered collectively to all children at T1, T2, and T3. The Strengths and Difficulties Questionnaire (SDQ) was answered by classroom teachers at T1, T2, and T3.

#### *Spence Children's Anxiety Scale*

The SCAS (Spence, 1997) is a self-report measure of anxiety designed for use with children aged 8–12 years. The SCAS consists of 44 items, 38 of which assess specific anxiety symptoms (e.g. symptoms of social phobia, separation anxiety, panic attack, and agoraphobia). The remaining 6 items serve as positive 'filter items' to reduce

negative response bias. Children are asked to rate, on a four-point scale ranging from never (0) to always (3), the frequency with which they experience each symptom. The SCAS has shown good internal reliability and correlates highly with other anxiety measures (Muris, Schimdt, & Merckelbach, 2000; Nauta et al., 2004). The total score of the Swedish translation of the SCAS was used in the current study. Psychometric properties have been examined for the Swedish version reporting a reliability coefficient of 0.93 on the SCAS scores, and support for convergent and divergent validity (Essau, Sasagawa, Anastassiou-Hadjicharalambous, Guzmán, & Ollendick, 2011).

#### *Children's Depression Inventory*

The CDI (Kovacs, 1985) is a self-report measure used for depressive symptoms in children aged 7–17 years. The CDI has 27 items related to the cognitive, affective, and behavioural signs of depression. Each item contains three statements, and children select the one statement that best describes them in the past two weeks. Statements within each item are scored according to the severity of children's symptoms: no symptomatology present (0), mild symptomatology (1), or severe symptomatology (2). A total score is calculated by summing the statements chosen by the students. The CDI is the most common self-report measure of depression in children and has been widely used to measure depressive symptoms in non-clinical community samples (Twenge & Nolen-Hoeksema, 2002). The Swedish translation of the CDI was used for this study. Psychometric properties have been examined for the Swedish version reporting a reliability coefficient of 0.86 on the CDI scores (Larsson & Melin, 1992).

#### *Strengths and Difficulties Questionnaire*

The SDQ (Goodman, 1997) is a 25-item measure of psychological adjustment for use with children aged 3–16 years. The items are divided between five scales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-social behaviour. The SDQ can be administered to children, parents, and teachers. In this study, participants' classroom teachers completed the Swedish version of the SDQ. Teachers were required to endorse either 'not true' (0), 'somewhat true' (1), or 'certainly true' (2) in response to each statement, with higher scores indicative of greater problems for each subscale except for pro-social behaviour. The SDQ has sound psychometric properties, including concurrent validity, and the ability to distinguish between community and clinical samples (Goodman & Scott, 1999). The Swedish version of the SDQ was used for this study. Psychometric properties have been examined for the Swedish version reporting a reliability coefficient of 0.76 on the SDQ total score of difficulty and 0.70 on the subscale of pro-social behaviour (Smedje, Broman, Hetta, & Knorrning, 1999).

#### *Social validity*

To measure the acceptability of the intervention, a questionnaire of social validity was administered to the children at T3. The questionnaire is a Swedish translation of the 'FRIENDS evaluation form for children' (Barrett, 2005) and contains 11 items, for example 'How much did you enjoy the FRIENDS program?' and 'How much did you learn about how to cope with feeling worried or upset?'

### **Procedure**

Measures were administered to all participants at three time points. Instructions and test items for all measures were read aloud and participants were informed that all responses were confidential. Teachers completed the SDQ at a separate time.

The group leader that implemented the intervention completed a two-day training covering the principles and practices of prevention and early intervention. The training provided a step-by-step guide to the intervention programme.

Following the assessments at T1 and T2, the prevention programme was implemented. The programme was implemented once a week for 10 consecutive weeks. Sessions lasted 60–75 min. All children who participated in this study were present in at least 7 out of the 10 sessions.

### **Implementation**

A protocol integrity measure was used to assess treatment adherence. All sessions were audio-recorded and 30% were randomly selected to examination. This assessment was conducted by three graduate students in psychology using the Swedish translation of the Fidelity of Implementation Checklist for the FRIENDS programme structure (Barrett, 2005). The checklist determines the group leader's degree of adherence to the programme structure. It assesses how well the main goals for each session and the objectives of each activity were achieved. Using a Likert-type scale, the checklist provided four response categories: 'not at all' (1), 'not very well' (2), 'partially well' (3), and 'very well' (4). Fidelity of implementation was calculated by averaging the scores across all the observations. The mean for main goals was 3.89, indicating that the programme was implemented very well. The mean for the objectives of activities was 3.51, indicating that the programme was well implemented. The ratings showed that the main goals for the sessions were 89% 'very well achieved' and 11% 'partly achieved'. For the objectives of all activities, the ratings showed that 70% were 'very well achieved', 19% 'partly achieved', 3% 'not very well achieved', and 8% 'not achieved at all'. Inter-rater reliability was calculated with the Intraclass Correlation Coefficient (Shrout & Fleiss, 1979), reporting to be 0.65, which means a good inter-rater reliability according to guidelines (Cicchetti, 1994).

### **Intervention protocol and materials**

The culturally adapted Swedish version of *FRIENDS for Life* (Barrett, 2004a, 2004b) was used as the intervention protocol. *FRIENDS for Life* is a social and emotional programme designed to enhance resilience in children. It incorporates physiological, cognitive, and behavioural strategies to assist children in coping with stress and worry. The behavioural component includes the monitoring of feelings and thoughts, out-of-session and mental imagery exposure and relaxation training. The cognitive component teaches children to recognize their feelings and thoughts and the link between them. It also teaches students to identify faulty cognitions and incompatible self-statements, and to elaborate alternative interpretations of difficult situations. Learning techniques include group discussions, hands-on activities, and role-play. Approximately one session is dedicated to learn each of the seven steps represented by the FRIENDS acronym. The Swedish acronym is parallel to the English in terms of the concepts taught. After the introductory session, children start to learn the letter *F*, which stands for 'Feelings', followed by the letter *R* 'Relax', *I* 'I can do it!', *E* 'Explore solutions and coping step plans', *N* 'Now reward yourself', *D* 'Don't forget to practice', and *S* 'Smile and stay calm'. Within each session, the group leader



models the skills, and after the skills are taught, children have opportunities to practice in small groups and debrief with the whole classroom. The programme encourages the building of social support groups and respect for diversity. There are two informational sessions for parents of about 1.5 h each. In these sessions, parents learn about the skills and techniques taught in the programme, about the importance of family and peer support, and about the promotion of the practice of problem solving rather than avoidance of anxiety-provoking situations.

## Results

### *Preliminary analysis*

Preliminary analysis of data revealed skewed data for the SCAS and the CDI measures; therefore, data from these measures were transformed with the square root (Bulmer, 1965). After transformation, the data were no longer significantly skewed (skewness  $\leq \pm 1.00$ ). The data of the SDQ subscale of pro-social behaviour were also skewed and transformed with the squared root. However, even after transformation, the data were still significantly skewed (skewness  $> \pm 1.00$ ). Therefore, a non-parametric test was used (Friedman's test) for this measure.

Internal consistency reliability was calculated for the three measures administered at T1 using Cronbach's alpha coefficient. Analysis revealed good internal consistency on the items of the Swedish version of the CDI (0.84) and the Swedish version of the SDQ (0.82), and excellent internal consistency on the items of the Swedish version of the SCAS (0.91).

Pearson correlations were performed to examine the relationships among the pre-test scores of the SCAS, CDI, and SDQ. The correlations were positive between the SCAS and the CDI ( $r = 0.39, p = 0.006$ ), and between the SDQ and the CDI ( $r = 0.43, p = 0.002$ ). No statistically significant correlation was found between the SCAS and SDQ ( $r = 0.192, p = 0.186$ ).

In this study, 45 of the 50 children completed the SCAS and the CDI assessments at the three time points (T1–T3) and 46 of the 50 children completed the 'FRIENDS evaluation form for children' at T3. Dropouts and absenteeism were due to sickness or change of school. The SDQ was completed by the teachers for all the 50 children in the sample at the three time points (T1–T3).

### *Intervention effects*

#### *Anxiety*

Table 1 displays the means, standard deviations, and effect sizes at each time point for the SCAS. Repeated measures ANOVA revealed a statistically significant change for anxiety

Table 1. Mean (*M*) and standard deviation (*SD*) at all assessments (T1–T3) and calculated effect size, Cohen's *d* (*d*) over control assessments (T1–T2) and intervention assessments (T2–T3) for all children ( $n = 45$ ), high-risk children ( $n = 22$ ), and low-risk children ( $n = 23$ ) at the SCAS.

SCAS	<i>M</i> ( <i>SD</i> ) T1	<i>M</i> ( <i>SD</i> ) T2	<i>M</i> ( <i>SD</i> ) T3	<i>d</i> T1–T2	<i>d</i> T2–T3
All children	26.2 (14.8)	23.7 (17.6)	21.1 (14.4)	0.15*	0.16
Increased risk	35.8 (15.3)	36.2 (17.0)	29.9 (15.5)	0.02	0.39*
Low-risk	16.5 (5.4)	11.7 (6.3)	13.0 (7.1)	0.82**	0.19

\* $p \leq 0.05$ ; \*\* $p \leq 0.01$ .

across time ( $F_{2,86} = 7.06, p = 0.001$ ). Post-hoc comparisons using the Fisher's LSD test revealed a statistically significant change from T1 to T2 control assessments ( $p = 0.016$ ), but no significant intervention effect from T2 to T3 ( $p = 0.274$ ). Children were divided into two groups: those with increased risk for anxiety and those with low risk for anxiety. The risk for anxiety was established by norms from the author of the SCAS (Spence, 2010). Children with a T-score over 60 at any of the assessments (T1–T3) were included in the increased risk group. Repeated measures ANOVA revealed a statistically significant change for anxiety across time for both groups: those children at increased risk ( $F_{2,42} = 3.68, p = 0.034$ ) and those at low risk ( $F_{2,44} = 6.13, p = 0.004$ ). For the increased risk group, post-hoc comparisons using the Fisher's LSD test revealed no statistically significant change over the T1–T2 control assessments ( $p = 0.880$ ), but a statistically significant intervention effect from T2 to T3 ( $p = 0.016$ ). For the low-risk group, post-hoc comparisons using the Fisher's LSD test revealed a statistically significant change from T1 to T2 control assessments ( $p = 0.001$ ), but no statistically significant intervention effect from T2 to T3 ( $p = 0.426$ ).

### Depression

Table 2 displays the means, standard deviations, and effect sizes at each time point for the CDI. Repeated measures ANOVA revealed a statistically significant change for depression across time ( $F_{2,86} = 3.98, p = 0.022$ ). Post-hoc comparisons using the Fisher's LSD test revealed no significant change from T1 to T2 control assessments ( $p = 0.704$ ); however, an intervention effect was found from T2 to T3 ( $p = 0.041$ ).

### General mental health

Table 3 displays the means, standard deviations, and effect sizes at each time point for the SDQ completed by classroom teachers. The SDQ was divided into difficulties scale and pro-social behaviour scale. Repeated measures ANOVA revealed a statistically significant change for the difficulties scale across time ( $F_{2,98} = 11.31, p = 0.001$ ). Post-hoc comparisons using the Fisher's LSD test revealed no significant change from T1 to T2 control assessments ( $p = 0.802$ ); however, an intervention effect was found reporting a statistically significant

Table 2. Mean ( $M$ ) and standard deviation (SD) at all assessments (T1–T3) and calculated effect size, Cohen's  $d$  ( $d$ ) over control assessments (T1–T2) and intervention assessments (T2–T3) at the CDI.

CDI	$M$ (SD) T1	$M$ (SD) T2	$M$ (SD) T3	$D$ T1–T2	$d$ T2–T3
All children	8.3 (6.7)	8.1 (6.5)	6.4 (5.2)	0.03	0.29*

\* $p \leq 0.05$ .

Table 3. Mean ( $M$ ) and standard deviation (SD) at all assessments (T1–T3) and calculated effect size, Cohen's  $d$  ( $d$ ) over control assessments (T1–T2) and intervention assessments (T2–T3) at the SDQ, divided into total difficulties and pro-social behaviour ( $n = 50$ ).

SDQ	$M$ (SD) T1	$M$ (SD) T2	$M$ (SD) T3	$D$ T1–T2	$d$ T2–T3
Total difficulties	6.0 (4.8)	5.9 (4.9)	4.4 (4.0)	0.02	0.34**
Pro-social behaviour	8.6 (1.8)	8.5 (1.8)	8.9 (1.7)	0.06	0.23**

\*\* $p \leq 0.01$ .



decrease in difficulties from T2 to T3 ( $p = 0.001$ ). On the pro-social subscale, Friedman's one-way analysis revealed a statistically significant change across time ( $\chi^2 = 8.58$ ,  $df = 2$ ,  $p = 0.014$ ). Post-hoc comparisons using the Wilcoxon rank test for repeated measures revealed no significant change on the T1–T2 control assessments ( $z = -0.40$ ,  $N$ -Ties = 28,  $p = 0.690$ ); however, an intervention effect was found reporting a statistically increase in pro-social behaviour from T2 to T3 ( $z = 2.92$ ,  $N$ -Ties = 21,  $p = 0.004$ ).

### **Social validity**

Almost all of the children (98%) enjoyed the FRIENDS programme a lot or quite a lot, and thought that they learned a lot or quite a lot about feelings. Eighty-seven per cent felt that they learned quite a lot or a lot about how to cope with feeling worried or upset. Two-thirds (67%) reported that they used the skills learned in the programme a lot or quite a lot, while one-third (33%) reported that they used the skills a little. Two-thirds (67%) also said that they would continue to use the skills learned, and one-third (33%) said that they might. According to the children, the most useful skills learned in the programme were thinking green (helpful) thoughts, helping others feel good, and understanding their own emotions.

### **Discussion**

The purpose of this study was to investigate the effectiveness of a universal prevention programme for childhood anxiety and depression, in a Swedish context. The hypotheses were that the children would report a decrease in their anxiety and depressive symptoms and that the classroom teachers would report an increase in children's general mental health after the children had received the programme. The results were partly consistent with the hypotheses. The children reported a significant decrease in depressive symptoms and the classroom teachers reported a significant increase in general mental health after the intervention. These findings are similar to the findings that have been reported by other investigators (Lock & Barrett, 2003; Lowry-Webster et al., 2001), suggesting that the programme could be an effective strategy in promoting mental health. The result from the 'FRIENDS evaluation form for children' strongly indicated that the children appreciated the programme. The high fidelity to the group leader manual indicates that the result of the intervention might be generalized to other deliverer. The fact that the intervention can be delivered by classroom teachers is an added benefit that adds to the cost-effectiveness of the strategy since a large number of children can be reached over a relatively short period of time (Donovan & Spence, 2000; Gladstone & Beardslee, 2009).

Regarding anxiety symptoms, only children at increased risk for anxiety showed a significant decrease in anxiety symptoms after the intervention. Previous research on *FRIENDS for Life* programme has generally shown a significant decrease in anxiety symptoms. However, there have also been studies (e.g. Mostert & Loxton, 2008) where significant changes in anxiety symptoms are only visible at follow-up showing a sleeper effect.

The effect sizes for statistically significant findings range from 0.23 to 0.39, which, according to Cohen (1988), are considered 'small'. The small size of the effects in this study is in line with the findings from previous research on universal prevention (Neil & Christensen, 2009; Wilson & Lipsey, 2007).

### **Strengths of the study**

The present study is the first study that evaluated *FRIENDS for Life* as a universal intervention in Sweden. In addition to the measures of anxiety and depression, the present

study also included teacher assessments of children's general mental health. The results of the teacher ratings are noteworthy, which reported an increase in pro-social behaviour and a decrease in difficulties, which indicates that the *FRIENDS for Life* programme, in addition to preventing anxiety and depression, might also have an impact on children's social behaviour in the classroom and on general mental health difficulties.

### ***Limitations of the study***

In this study, effectiveness was evaluated from pre-test to post-test with the double pre-test serving as the control condition. A more rigorous design that includes an independent control group, a bigger sample size, and follow-up assessments would be ideal to answer the research questions more accurately.

When interpreting the findings of this study, it is necessary to take into account the limitation of lack of statistical power due to small sample size. Having a large sample size is particularly important when working with normal population where only a rather small part of the individuals will be 'at risk' or will meet the criteria for an anxiety disorder. It is desirable to have larger populations for better power and for more reliable sub-group analyses (Gladstone & Beardslee, 2009; Neil & Christensen, 2009).

Finally, another limitation was the very little amount of parental involvement during the implementation of the programme. The classroom teachers informed parents about the programme and the parent sessions; however, very few parents attended. The goal of the parent sessions is to provide information on children's typical fears, anxiety, and depressive early symptoms; the importance promoting community resilience; and how to implement the resilience strategies of the programme at home (Barrett, 2004a). On the basis of risk and protective factors (Barrett, Dadds, & Rapee, 1996; Donovan & Spence, 2000) and treatment research (Barrett et al., 1996), parent involvement is crucial for programme effectiveness as it provides substantial benefits for those children receiving the *FRIENDS for Life* programme. Further studies should pay special attention in the promotion of parent sessions by sending several written reminders, additional information on resilience and parenting strategies among others (Neil & Christensen, 2009).

### ***Future directions***

These results of this study are promising and provide support to *FRIENDS for Life* as a universal preventative intervention for Swedish children. To answer whether *FRIENDS for Life* can prevent anxiety and depression disorders and increase general mental health, larger studies with independent control conditions and long-term follow-up measurements need to be conducted.

To a further understanding of the *FRIENDS for Life*'s impact on children's general mental health and its effect on pro-social behaviour, future studies should include a broader variety of measures. To further develop universal interventions, more knowledge about factors that predict positive outcome is needed.

### **Conclusion**

This is the first study examining the school-based prevention of anxiety and depression in Swedish children. Results from this study are promising and provide support for the *FRIENDS for Life* as a positive universal prevention strategy for Swedish children. Further studies should continue exploring the effects of programme as a tool to promote emotional resilience in the classrooms. Subsequent studies should include a larger sample size, an

independent control group, and follow-up assessments. It would be an idea to also explore predictors of treatment outcome to increase our knowledge and tailor universal intervention that better meets the needs of our population. Working on increasing emotional resilience in children will help to prevent some of the negative consequences of anxiety such as depression, substance abuse, and deviant conduct.

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