

## Academic Critique of the 'FUN FRIENDS' programme

**Lauren Dobson.** Academic Critique, submitted April 2021

The Early Years are an important context for the growth of personal, social, and emotional development (DFE, 2017). The curriculum highlights the need for children to start school with self-confidence, self-awareness; and the ability to manage their feelings, behaviours, and social interactions (DFE, 2017). These skills allow children to thrive both within the classroom, the wider community, and their personal relationships.

If children are not provided with sufficient opportunities or support in building their social and emotional skill set this can interfere with their developmental trajectory and could place them at risk to future mental health difficulties such as anxiety (Ginsburg, La Greca, & Silverman, 1998). Recent research suggests that anxiety disorders are one of the most common psychiatric diagnoses among children and symptoms typically develop during preschool (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015; Egger & Angold, 2006). Therefore, universal prevention measures within the early years, which seek to develop social and emotional skills, could prevent the development of mental health difficulties such as anxiety.

The FUN FRIENDS (FF) intervention is part of the FRIENDS programmes (Friends for Life and My Friends Youth) created in Australia to support children and young people in enhancing their emotional resilience and preventing the development of anxiety and depression (Pahl & Barrett, 2007). FRIENDS is an acronym which stands for the aims of the intervention (Feelings, Relax, I can try, Encourage, Nurture, Don't forget to be brave and Stay positive). Refer to table 1 for a description of session content. The programme aims to support children aged four to seven years in becoming 'emotionally and socially competent' through learning coping strategies to manage adversity (FRIENDSResilience, 2021)

The sessions are designed to be a school-based universal intervention which seeks to prevent the

development of anxiety and depression and promote resiliency. However, it can also be used as an effective 'treatment' intervention within clinical settings (Pahl & Barrett, 2007). The intervention consists of 12 two-hour group sessions which target five areas: developing a sense of self, social skills, self-regulation, prosocial behaviour, and responsibility for others. The programme is developed to adapt CBT approaches for children such as: cognitive restructuring, relaxation, and graded exposure to anxiety inducing contexts.

Sessions include play-based activities linked to the learning objective and skills build cumulatively throughout the intervention. Ideally, the child's parents will be involved at the end of a session to discuss the new skills and encourage practise at home. There is a parent handbook which provides follow up activities linked to each session. To deliver FUN FRIENDS facilitators need to work in education or be a registered allied health professional. Once a license registration is obtained, training and resources are provided (FRIENDSResilience, 2021).

### Research and Theory behind FUN FRIENDS

#### *Positive Psychology and Resilience*

On their website, FF is described as 'evidence-based, play-focused activities which allow children to build foundational resilience skills' (FRIENDSResilience, 2021). In addition, both FF manuals for parents and facilitators describe the resource as a 'guide for building resilience in children through play'. The term resilience has a range of definitions within psychological literature (Toland & Corrigan, 2011) however it can be best understood through the field of Positive Psychology. Gable and Haidt (2005, p.103) define positive psychology as "the study of the conditions

and processes that contribute to the flourishing or optimal functioning of people, groups and institutions.” Thus, resilience within the field of positive psychology refers to the conditions which support young children to ‘flourish’ and ‘function optimally’ throughout their lives. This could also be defined as protecting their mental health and wellbeing.

Toland and Carrigan (2011) reflected upon the theoretical roots of resilience and prior work of Schoon (2006) to define resilience as ‘an outcome of an interaction between the balance of protective/risk factors at the individual within child level and the balance of protective/risk factors at the level of the environment’ (p.98). Under this definition, FF could be thought of as enhancing both the protective factors within child via CBT techniques, and within the environment through parental and teacher engagement, to create optimal conditions for resiliency development.

### *Cognitive Behavioural Therapies (CBT)*

FF uses CBT techniques which have been adapted for children. CBT originated from Beck’s theory (1967) which suggested that individuals develop ‘maladaptive schemas’ based on expectations which develop through life experiences. The schemas can be activated by events within the environment and bias how the situation is interpreted. In CBT ‘clients’ are taught how to assess the nature of their thoughts, feelings and behaviours in order to build new ‘adaptive’ schemas which should protect against feelings of depression and/or anxiety (Beck, 1967).

Recent research has highlighted the utility of adapting CBT approaches to support preschool aged children (Hirshfeld-Becker et al., 2008). The early years may offer a unique window of opportunity to intervene universally before life experiences lead to the development of maladaptive schemas. Moreover, teaching all children to recognise and regulate their thoughts, feelings and behaviours in order build ‘adaptive schemas’ will support them in feeling resilient at the face of any later adversity.

Research into CBT approaches with children often incorporates parent intervention to support generalisation of the new skills to the home environment (Rapee, Kennedy, Ingram, Edwards, & Sweeney, 2010). Research by Monga, Rosenbloom, Tanha, Owens, and Young (2015)

compared the impact of CBT for a child only intervention versus inclusion of both the parent and child. Despite improvements within both groups, the parent and child combination demonstrated the greatest gains immediately after intervention and at follow up. Thus, inclusion of both child and parent in CBT style interventions is likely to have the greatest impact. FF includes two parent information sessions, recommends parent debriefs and includes a parent’s guide with weekly tasks. Hence FF, follows current understanding for best practice in delivering CBT approaches for children.

### **Empirical Evidence and Evaluation of FUN FRIENDS**

To understand and evaluate the evidence base for FF a systematic literature review was conducted. The papers were acquired through a systematic search using the following terms ‘(Fun FRIENDS)N1 AND intervention’ over two electronic databases: Education Resources Information Centre (ERIC) and PsychInfo via EBSCO (including grey literature) . See figure 1 for the PRISMA diagram (Moher, Liberati, Tetzlaff, & Altman, 2009) for the different phases for this review. Articles were included if the research had directly followed the FUN Friends version of the ‘FRIENDS’ programme, using the target population of four to seven years old within a school, community or clinical setting. All papers were quality assessed through the Joanna Briggs Institute (JBI) Critical Appraisal tools (See Appendices). Three papers are presented which address the use of FF as a universal school-based preventative intervention. A further four papers are discussed which assess the efficacy of FF as a clinical intervention.

#### *Evidence for the use of FF as a School based intervention*

Pahl and Barrett (2010) completed the first school based universal prevention trial of FF in Brisbane Australia. Nine schools were recruited and randomly allocated to either an intervention (IG) or wait list control group (WLG). A clinically trained postgraduate student delivered the sessions once a week over a nine-week period. The results from parent data indicated no significant differences between IG and WLG for measures of behavioural

inhibition, anxiety, or social and emotional strength after the intervention but there were significant reductions in anxiety 12 months later. However, the data collected 12 months later was only for the IG, thus these reductions could have been mirrored in the control group. Nevertheless, teacher data reported a significant improvement post intervention in behavioural inhibition and social/emotional strength.

Anticich, Barrett, Silverman, Lacherez and Gillies (2013) ran an extension of Pahl and Barrett's (2010) project to include a third comparison intervention group (You Can Do It). They recruited 488 children (aged four-seven years) from 14 schools and randomly allocated each to the intervention group (FF), comparison group or a waitlist group. Parents and teachers completed measures at pre intervention, post and 12 months follow up. For social and emotional strength, all groups improved significantly from pre to post and at follow up. When baseline measures were controlled for, these improvements were significantly greater in the intervention group than the control or comparative intervention. For behavioural difficulties, both FF and the comparison intervention showed significantly greater improvements than the waitlist group, but these were not maintained at the 12 month follow up. Finally, with regards to behavioural inhibition, FF showed significantly greater improvements than the comparison intervention at post intervention, and 12 months follow up. Thus, FF seems to be particularly effective at improving social/emotional strength (as defined by the researcher's choice of measures) and behavioural inhibition. The methodology deployed in this project was robust due to; the inclusion of a comparison group, protocol to ensure compliance with FF and the inclusion of a range of measures from both parents and teachers.

Doctoral thesis research by Lewis (2013) also assessed FF as a school based universal preventative intervention. One hundred and ten children were recruited from two schools within Virginia. One school received the FF intervention from their guidance counsellor over the course of 20 weeks (35-40 minute sessions). The second school served as a control group. A doctoral level clinician provided the parent information sessions however these were very poorly attended (less than 10%). Unexpectedly, the results indicated that anxiety symptoms increased from pre-post intervention for

children who received FF and decreased for the control group. However, anxiety symptoms did significantly decrease from pre-intervention to the follow up in the FF group which could lend support to the hypothesis that this intervention produces delayed effects (Pahl & Barrett, 2010). The researcher also chose to include a satisfaction questionnaire for teachers and children. They found that 85% of children and 93% of teachers rated FF positively. However, the guidance counsellor felt it was too prescriptive and required a lot of preparation. This provides a helpful understanding into potential barriers for implementation.

#### *Evidence for the use of FF as a clinical intervention*

Research by Barrett, Fisak and Copper (2015) assessed the impact of FF in the treatment of anxiety for children referred to a community clinic within Australia. They recruited thirty-one children (aged four-seven years) who were deemed to have at least one anxiety disorder (determined via interview). Ten weekly sessions were delivered in groups of 8-12 children. The results indicated significant reductions in child inhibition and anxiety symptoms alongside improvements in 'resiliency' both immediately after the intervention and at a 12 month follow up. However, attrition limits the validity of the follow up data and with an already small sample size, and no control group, causation cannot yet be inferred from these initially promising results.

Research by Van Der Mheen, Legerstee, Dieleman, Hillegers, & Utens (2020) in the Netherlands was the first European evaluation of FF. This study also adopted a one group pre/post test design; 28 'clinically' anxious children (aged four-eight years) were recruited who had been referred to a psychiatry centre within a children's hospital. Twelve weekly sessions were delivered in small groups of three to five children by a psychologist. At pre and post intervention parents completed an anxiety disorder interview schedule and child behaviour checklist. The results indicated a significant decrease in anxiety disorders and emotional/behavioural problems. However, the reduction in anxious/depressed symptoms was not significant. Children who exhibited higher levels of anxiety at pre-intervention stage were more likely to make the most progress from FF. Thus, results

indicate that the intervention may be most effective for children suffering with higher ratings of anxiety. Unfortunately, yet again the small sample size and lack of a control group impact the generalisability and validity of these results.

Recent research by Fisak, Gallegos-Guajardo, Verreyne, and Barrett (2018) evaluated the impact of FF when combined with a parent-based resiliency intervention called 'Strong not tough'. This intervention took place in an outpatient community clinic within Australia. 178 children aged four to seven years completed 10 sessions of FF typically lasting 90 minutes. The results indicated that both parents and children experienced a decrease in depressive and anxiety symptoms. Parents also reported significant reductions in stress alongside increased feelings of resilience. However, causation cannot yet be inferred due to the lack of a control group or comparative intervention. Furthermore, the impact of the parent resiliency programme may have indirectly impacted their child's improvements in functioning. Hence, it is not possible to differentiate what the sole impact of FF would be without the parenting intervention (Strong not Tough).

Finally, Bartra (2013) evaluated the impact of FF as a treatment for children with clinical anxiety as part of their doctoral thesis. Sixteen children were recruited for the FF arm of the project through a family development centre in Hong Kong. The sessions were delivered in groups of 6-10 children weekly at the centre by trained Psychologists. The results indicated that social phobia decreased from 86% pre-test to 47% post-test and Generalised Anxiety decreased from 30% pre-test to 13% post-test. Whilst these results are initially promising, the sample size is too small to ensure sufficient power for the statistical analysis deployed. In addition, the lack of a control group impacts the ability to draw any causation associated with the intervention.

#### *Limitations of the evidence base for FF*

It should be noted that across all studies there were a variety of common methodological concerns that impact the validity of the findings and the ability to compare results. Firstly, the amount of sessions delivered varied from between 9 and 20 (FF manual includes 12) and timings from 30 minutes up to 2 and half hours. Furthermore, there was variation in who delivered the intervention. In addition, only three of the seven studies adopted a control group,

and only two collected followed up data. Of those that did, there were high attrition rates and low parental engagement leading to gaps in the data. Moreover, there was a narrow range of similar measures used across all research projects; this could be due to the inclusion of Barrett (FF author) within four of these studies which may have been a conflict of interest.

## **Discussion and conclusions**

### *School-based prevention*

Currently, there is very limited evidence for the use of FF as a universal preventative intervention. Research is yet to prove that FF has a significant impact upon children's social and emotional resilience or levels of anxiety post intervention. However, follow up (12 months later) data does prove promising, perhaps suggesting delayed effects of the intervention. Theoretically this would be expected given a focus on 'prevention' rather than treatment. However, research has not yet managed to collect follow up data with a high completion rate from both intervention and control group to understand the long-term impact of FF as a school-based prevention programme.

The practicalities of implementing FF as universal programme within a school may also impact the efficacy of the intervention. For example, all studies struggled with parental engagement in the programme, yet it is a key part of the intervention and supports children to generalise new skills to the home environment. Perhaps, engaging parents whose children have been referred to a clinical setting may be easier given that they are already invested in the process of change. Moreover, Lewis (2013) found that the guidance counsellor delivering FF noted the burden of preparing the sessions and found the guides prescriptive. Therefore, the timing expectation upon both parents and school to invest in prevention not intervention may be a barrier to implementation.

### *FF as a 'clinical' intervention*

The results for the delivery of FF in community clinical settings proves initially more promising however the methodology is not as robust as that deployed in school prevention research (Anticich et al 2013, Pahl and Barrett, 2010). All studies found significant reductions in anxiety and social

emotional problems, but none used a control group to understand if these results could be attributed to the intervention. Furthermore, given that the participants within these projects would already have been experiencing higher levels of anxiety greater reductions post-intervention would be expected. Fisak, Gallegos-Guajardo, Verreynne, and Barrett (2018) used the largest sample and found the most promising results for both children and parents. However, this may have been to the combination of FF and the 'strong not tough' parent resilience programme.

### *Implications for Educational Psychologists and Wider Application*

It is the role of Educational Psychologists (EP) to support schools in understanding the efficacy of potential interventions to support the wellbeing of all students; currently, the evidence for both schools and clinical settings is only preliminary and causation cannot yet be inferred. This was also concluded in a review by the Early Intervention Foundation (EIF, 2021). However, the CBT style approach within FF shows promise in supporting children if parents are also engaged with the session content. Therefore, when supporting schools in considering the use of FF it will be important for the EP to highlight the parental commitment required. Furthermore, the collaborative nature of FF could have a wider impact upon school-parent relationships and foster open lines of communication from the early years of education which may have far reaching protective effects for all children.

If schools or Local Authorities were interested in perusing the delivery of FF, the role of Emotion Literacy Support Assistants or the new Education Mental Health Practitioners (EMHPs) may be suitable given their capacity to work with the child, family, school and wider community. EMHPs could also build up an evidence base for FF given their masters level training and understanding of theoretical foundations of the intervention. EPs would also be well placed to offer supervision for the professional providing the programme.

Given the current impact of COVID, enhancing resilience and protecting children's future wellbeing may be of increasing importance for schools (Young Minds, 2020), meaning that they may be able to allocate more time in planning and delivering

preventative work such as FF. EPs could support schools to carefully evaluate the impact of the intervention within their setting. Highlighting the importance of following a plan, do, review cycle (DFE, 2014) will be particularly important given the current limited evidence base.

**To cite this work**, please use the following:

Dobson, L. (2022, 29 September). Academic Critique of the 'FUN FRIENDS' programme. *University of Southampton Educational Psychology research blog*.

<http://blog.soton.ac.uk/edpsych/2022/09/29/academic-critique-of-the-fun-friends-programme>

### **References**

- Anticich, S. A. J., Barrett, P. M., Silverman, W., Lacherez, P., & Gillies, R. (2013). The prevention of childhood anxiety and promotion of resilience among preschool-aged children: a universal school based trial. *Advances in School Mental Health Promotion*, 6(2), 93–121. <https://doi.org/10.1080/1754730X.2013.784616>
- Barrett, P., Fisak, B., & Cooper, M. (2015). The treatment of anxiety in young children: Results of an open trial of the Fun FRIENDS program. *Behaviour Change*, 32(4), 231–242. <https://doi.org/10.1017/bec.2015.12>
- Batra, P. (2013). *Evaluation of the hong kong friends intervention program for childhood anxiety*. 53(9), 1689–1699. Retrieved from <https://www.proquest.com/docview/1477554289>
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. Hoeber Medical Division: Harper & Row.
- DFE. (2014). *SEND code of practice: 0 to 25 years*. Retrieved from: <https://www.gov.uk/government/publications/send-code-of-practice-0-to-25>
- DFE. (2017). *Statutory framework for the early years foundation stage, Setting the standards for learning, development and care for children from birth to five*. Retrieved from: <https://assets.publishing.service.gov.uk/govern>

- ment/uploads/system/uploads/attachment\_data/file/596629/EYFS\_STATUTORY\_FRAMEWORK\_2017.pdf
- Early Intervention Foundation. (2021). *Fun Friends*. Retrieved from: <https://guidebook.eif.org.uk/programme/fun-friends>
- Egger, H. L., & Angold, A. (2006). Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. *Journal of Child Psychology and Psychiatry*, 47(3-4), 313-337. <https://doi.org/10.1111/j.1469-7610.2006.01618.x>
- Fisak, B., Gallegos-Guajardo, J., Verreynne, M., & Barrett, P. (2018). The results of a targeted open trial of the Fun FRIENDS combined with a concurrent parent-based intervention. *Mental Health and Prevention*, 10, 35-41. <https://doi.org/10.1016/j.mhp.2018.03.001>
- FRIENDSResilience (2021). *Fun Friends Programme*. Retrieved from: <https://friendsresilience.org/>
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology?. *Review of General Psychology*, 9(2), 103-110. <https://doi.org/10.1037/1089-2680.9.2.103>
- Ginsburg, G. S., La Greca, A. M., & Silverman, W. K. (1998). Social anxiety in children with anxiety disorders: Relation with social and emotional functioning. *Journal of Abnormal Child Psychology*, 26(3), 175-185.
- Hirshfeld-Becker, D. R., Masek, B., Henin, A., Blakely, L. R., Rettew, D. C., Duffon, L., ... & Biederman, J. (2008). Cognitive-behavioral intervention with young anxious children. *Harvard Review of Psychiatry*, 16(2), 113-125. <https://doi.org/10.1080/10673220802073956>
- Lewis, K. M. (2013). *An ounce of prevention: Evaluation of the Fun FRIENDS program for kindergarteners in a rural school*. (Doctoral dissertation). Virginia Tech.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Medicine*, 6(7), e1000097.
- Monga, S., Rosenbloom, B. N., Tanha, A., Owens, M., & Young, A. (2015). Comparison of child-parent and parent-only cognitive-behavioral therapy programs for anxious children aged 5 to 7 years: Short-and long-term outcomes. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54(2), 138-146. <https://doi.org/10.1016/j.jaac.2014.10.008>
- 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. <https://doi.org/10.1375/ajgc.17.1.81>
- 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. <https://doi.org/10.1080/1754730X.2010.9715683>
- Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual Research Review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry*, 56(3), 345-365. <https://doi.org/10.1111/jcpp.12381>
- Rapee, R. M., Kennedy, S. J., Ingram, M., Edwards, S. L., & Sweeney, L. (2010). Altering the trajectory of anxiety in at-risk young children. *American Journal of Psychiatry*, 167(12), 1518-1525. <https://doi.org/10.1176/appi.ajp.2010.09111619>
- Schoon, I. (2006). *Risk and resilience: Adaptations in changing times*. London: Cambridge University Press.
- Toland, J., & Carrigan, D. (2011). Educational psychology and resilience: New concept, new opportunities. *School Psychology International*, 32(1), 95-106. <https://doi.org/10.1177/0143034310397284>
- Van Der Mheen, M., Legerstee, J. S., Dieleman, G. C., Hillegers, M. H. J., & Utens, E. M. W. J. (2020). Cognitive Behavioural Therapy for Anxiety Disorders in Young Children: A Dutch Open Trial of the Fun FRIENDS Program. *Behaviour Change*, 37(1), 1-12. <https://doi.org/10.1017/bec.2019.16>
- Young Minds. (2020). *Coronavirus: impact on young people with mental health needs*. Retrieved from: <https://youngminds.org.uk/about-us/reports/coronavirus-impact-on-young-people-with-mental-health-needs/>

## Appendix 1

### Description of session content

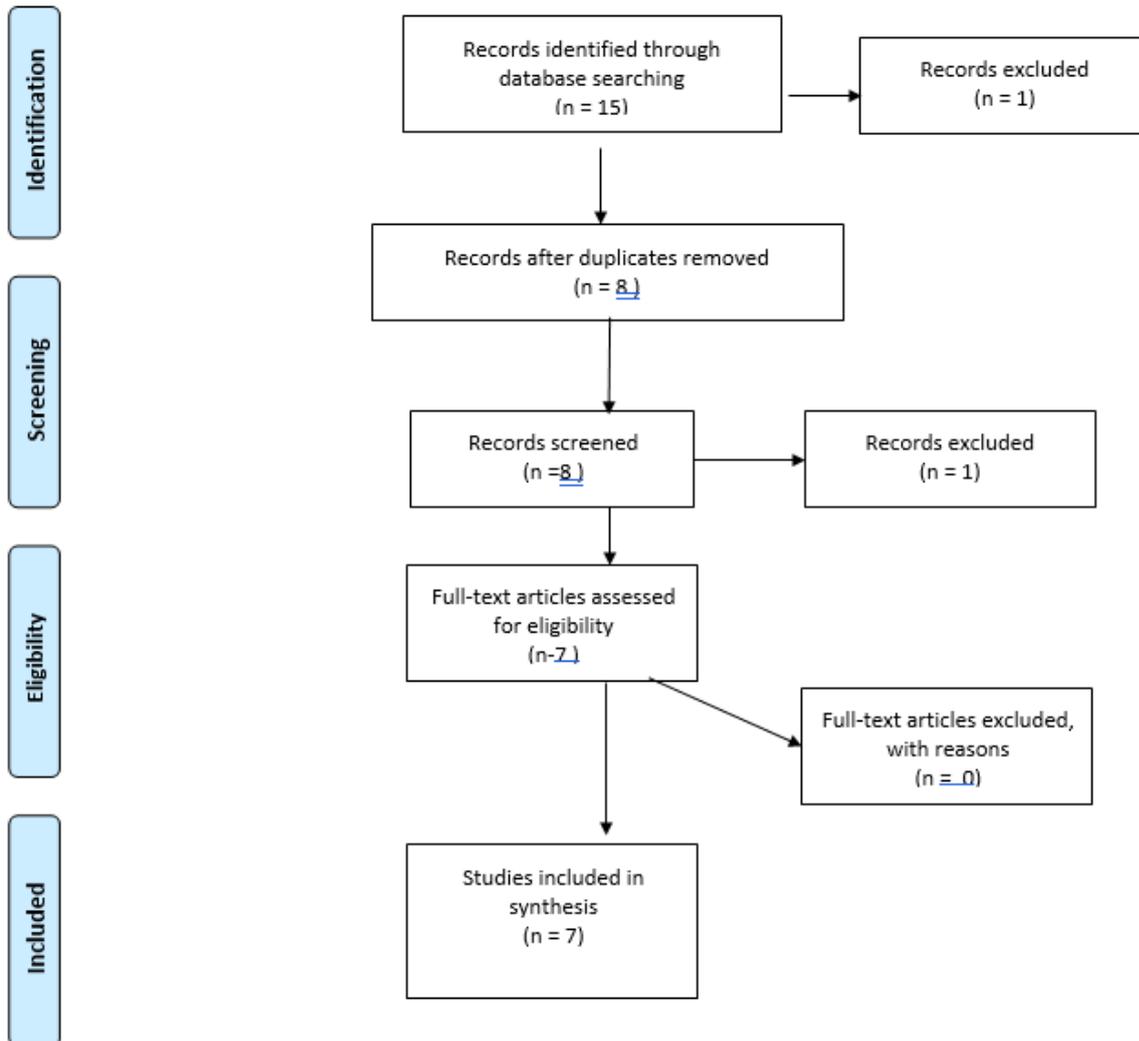
<b>FUN FRIENDS Session description</b>	<b>Name of accompanying session within the parent guide</b>
Session 1: Getting Started	My family and I
Session 2: My Feelings	Understanding feelings in ourselves
Session 3: Your Feelings	Understanding feelings in other people
Session 4: Our bodies and relaxation games	Understanding body cues
Session 5: Red and Green thoughts	Learning about helpful and unhelpful thoughts
Session 6: Changing red into green thoughts	Learning more about unhelpful and helpful thinking
Session 7: Doing things one step at a time	Learning to set goals and trying to do new things.
Session 8: Steps to being a good friend	Learning how to be a good friend
Session 9: Giving ourselves a pat on the back	Learning about rewarding ourselves
Session 10: Family, schools, neighbours and friends	Family adventure: learning about role models in our lives.
Session 11: Our circle of love and friends	Learning about support teams in our lives
Session 12: Dress up party!	Learning to be happy with our efforts

## Appendix 2

PRISMA flow diagram (Moher, Liberati, Tetzlaff, & Altman, 2009) of the systematic search process



PRISMA 2009 Flow Diagram



## Appendix 3

### Data Extraction Table

Article and author	Research design	Participants	Findings and notes	Limitations
<p>1) The results of a targeted open trial of the Fun FRIENDS combined with a concurrent parent-based intervention.</p> <p>Fisak, Brian; Gallegos-Guajardo, Julia; Verreynne, Marnize; Barrett, Paula (2018)</p>	<p>10 sessions for children</p> <p>8 sessions for parents with the Strong Not Tough: Adult Resilience Program</p> <p>Self-report measures completed by parents at pre-intervention and immediate post intervention:1-2 weeks).</p>	<p>178 children aged four to seven years</p> <p>Referred to an outpatient, community clinic located in an urban area of Brisbane, Australia.</p>	<p>Significant decreases in child anxiety and depression symptoms.</p> <p>From pre to post-intervention, mothers and fathers also exhibited significant decreases in levels of anxiety and depression.</p> <p>Reductions in maternal, but not paternal, parent-child stress were associated with lower child anxiety scores at post-intervention</p>	<p>Comparison group was not available.</p> <p>No follow up data</p> <p>No teacher report of observation measures</p> <p>Only 10 sessions but 12 in the manual</p>
<p>2) Cognitive Behavioural Therapy for Anxiety Disorders in Young Children: A Dutch Open Trial of the Fun FRIENDS Program</p> <p>Malindi van der Mheen<sup>1</sup>, Jeroen S. Legerstee<sup>1</sup>, Gwendolyn C. Dieleman<sup>1</sup>,</p>	<p>A one-group pretest-posttest design</p> <p>12 weekly 1.5-hour sessions</p> <p>Groups of 3 to 5 children</p>	<p>Twenty-eight clinically anxious children (4–8 years old)</p> <p>Referred to a psychiatry unit</p>	<p>Significant decreases were found:</p> <ul style="list-style-type: none"> <li>• anxiety disorders, emotional</li> <li>• behavioural problems,</li> <li>• The decrease in anxious/depressed problems and externalising problems was not significant</li> </ul>	<p>No control group</p> <p>No longer term follow up measures</p>

<p>Manon H.J. Hillegers<sup>1</sup> and Elisabeth M.W.J. Utens<sup>1,2,3*</sup></p>	<p>Parents completed measures to assess emotional and behavioural problems in children before and after the intervention.</p>	<p>within a children's hospital.</p>	<ul style="list-style-type: none"> <li>• higher preintervention anxiety levels predicted more treatment progress, whereas sex and age did not</li> </ul>	
<p>3) The Treatment of Anxiety in Young children: Results of an Open Trial of the Fun FRIENDS Program</p> <p>Paula Barrett,<sup>1</sup> Brian Fisak<sup>2</sup> and Marita Cooper<sup>3</sup></p> <p>2015</p>	<p>10 weekly sessions</p> <p>Parents also received two information sessions.</p> <p>Child anxiety, behavioural inhibition, and resiliency were assessed at preintervention, immediate postintervention, and at 12-month follow-up</p>	<p>31 children diagnosed with an anxiety disorder.</p>	<p>Significant decreases in child anxiety and behavioural inhibition</p> <p>Improvements on measures of resiliency.</p> <p>child gender, age, and family income were not associated with treatment outcome at postintervention.</p> <p>Maternal and Paternal depression, anxiety, and stress related to the parent-child relationship at preintervention were not predictors of treatment outcome</p>	<p>Attrition</p> <p>No control</p> <p>The study relied primarily on parent report.</p> <p>Small sample</p>
<p>4) Preventing Anxiety and Promoting Social and Emotional Strength in Preschool Children: A Universal Evaluation of the Fun FRIENDS Program</p> <p>2010</p> <p>Pahl and Barret</p> <p>(Pilot study)</p>	<p>Schools were randomly allocated to an intervention group (IG) or a waiting list control group(WLG).</p> <p>9 weekly sessions lasting an hour</p>	<p>263 children aged four to six</p> <p>Attending preschool in Brisbane, Australia.</p>	<p>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.</p> <p>Teacher reports revealed significant improvements at post-intervention</p>	<p>No control group at follow up</p> <p>Parents were invited and encouraged to attend three parent information sessions, but attendance at these was low.</p>

			on BI and social-emotional strength for children who had received the program.	<p>The exact number of parents in attendance was not recorded, so the effects cannot be analyzed.</p> <p>Missing data (around 40%) at post-intervention and at 12-month follow-up for parent report.</p>
<p>5) The prevention of childhood anxiety and promotion of resilience among preschool-aged children: A universal school based trial.</p> <p>Anticich, Sarah A. J.; Barrett, Paula M.; Silverman, Wendy; Lacherez, Philippe; Gillies, Robyn; <i>Advances in School Mental Health Promotion</i>, Vol 6(2), Apr, 2013</p>	<p>Randomly allocated to the intervention, active comparison and waitlist control group.</p> <p>Parents and teachers completed measures at pre- and post- and 12-month follow up.</p>	<p>488 children aged 4-7 years</p> <p>440 fathers and 484 mothers completed the questionnaires.</p>	<p>Comparable results were obtained for the intervention and comparison groups; however the intervention group achieved greater reductions in behavioural inhibition, child behavioural difficulties and improvements in social and emotional competence.</p> <p>Significant improvements in parenting distress and parent-child interactions were found for the intervention group, with gains were maintained at 12-month follow-up.</p> <p>Teacher reports revealed more significant improvement in social and emotional competence for the intervention group</p>	<p>Comparison group received less training.</p> <p>200 of the 488 participants were missing on at least one observation</p>

<p>6) An ounce of prevention: Evaluation of the fun friends program for kindergarteners in a rural school.</p> <p>2013</p> <p>Dissertation/ Thesis Lewis, Krystal M</p>	<p>15-session programme for intervention school.</p> <p>Sessions were 35-45 minutes</p> <p>The guidance counsellor delivered the sessions.</p>	<p>One hundred and ten children from two schools Southwest Virginia.</p> <p>Fifty-seven children received the intervention</p> <p>Fifty-three children served as a control group.</p>	<p>Significant decreases in anxiety symptoms from pre to follow-up for both groups of children</p> <p>Anxiety symptoms increased from pre to post for children in the intervention school whereas they decreased for children in the control school</p>	<p>Timing of sessions- shorter than recommended</p> <p>Business as usual approach at control school</p>
<p>7) Evaluation of the Hong Kong friends intervention program for childhood anxiety.</p> <p>Batra, Parul</p>	<p>Participants were interviewed to establish diagnosis based on the Anxiety Disorders Interview Schedule – IV (ADIS-IV).</p> <p>The treatment programme was conducted by two psychologists</p> <p>Each group comprised of approximately 6-10 students.</p>	<p>16 participants in the FF arm of the research</p>	<p>Mixed measure ANOVA analyses revealed that the FRIENDS program yielded significant reductions in total anxiety levels and overall stress for both age groups relative to the control sample, with larger effect sizes among Fun FRIENDS</p> <p>Based on the ADIS-IV, the percentage of children meeting criteria for probable Social Phobia diminished from 86.8% at pre-test to 47.8% at post-test for the younger Fun FRIENDS</p> <p>For Generalised Anxiety Disorder, 30.4% of the younger participants met criteria at pre-test and 13.04% participants met criteria at post-test,</p>	<p>Small sample size</p> <p>Not sufficiently powered</p> <p>Low parent uptake high attrition</p>

## Appendix 4

### JBI Critical Appraisal Checklist for Quasi-experimental Studies (Vandermmehan, 2019)

Item	Study number (see Appendix 3)						
	1	2	3	4	5	6	7
1. Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Were the participants included in any comparisons similar?	N/A	N/A	N/A	Yes	Yes	Yes	N/A
3. Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	N/A	N/A	N/A	Unclear	Unclear	Unclear	N/A
4. Was there a control group?	N/A	No	No	Yes	Yes	Yes	No
5. Were there multiple measurements of the outcome both pre and post the intervention/exposure?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	No	Yes	Yes	Yes	Yes	Unclear	No
7. Were the outcomes of participants included in any comparisons measured in the same way?	N/A	N/A	N/A	Yes	Yes	Yes	N/A
8. Were outcomes measured in a reliable way?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9. Was appropriate statistical analysis used?	Yes	Unclear	Yes	Yes	Yes	Yes	Unclear