

# The Feasibility and Acceptability of a School-Based Acceptance and Commitment Therapy Program for Anxiety in Children: A Pilot Investigation

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## Abstract

**Objective:** To investigate the feasibility of implementing an existing empirically based acceptance and commitment therapy program for children with anxiety—"ProACTIVE"—tailored to school children. The purpose of the pilot study was to guide the planning of a larger scale more comprehensive investigation.

**Methods:** Two groups of school aged children in Western Sydney (one primary school, n=8 aged 7-12, one high school aged 12-15 years, n=8) with an anxiety disorder (N=16), nominated by their school counselor, teacher or parent, participated in a 10-week pilot trial of the intervention.

**Results:** Quantitative assessments of the program revealed improvements in children's anxiety and quality of life outcomes. Qualitative data from individual post-intervention interviews reported parents perceived their child benefitted most from ACT skills such as mindfulness and defusion. They also found the concept of facing fears step by step and integrating this with mindfulness greatly assisted managing their anxiety. Three school counselors trained in ProACTIVE trialed and evaluated the program; they were unanimously positive about the program. Following feedback, the program was further refined to improve communication with parents and preparation for exposure therapy.

**Conclusion:** The findings suggest ProACTIVE is a feasible intervention for children with anxiety and offers guidance to those schools currently using or wishing to use ProACTIVE to assist their students manage anxiety.

**Keywords:** Feasibility acceptance • Commitment therapy • Schools • Pilot study • Anxiety

## Introduction

The evidence base for school-based programs that aim to promote well-being, support emotional and social learning, prevent and treat mental health problems in adulthood is growing [1]. This is timely given between 10%-20% of children and adolescents worldwide experience mental disorders, and half of all the mental health conditions we experience at some point in our lives will have started by age 14 [2]. Also sobering is that mood and anxiety disorders are associated with a range of adverse outcomes, with one in ten young people aged 12-17 years old engaging in self-harm, one in 13 will seriously consider a suicide attempt, and one in 40 will attempt suicide [3].

From a practical perspective, there are compelling reasons to develop treatment interventions for school children that can be delivered through the school system. Schools provide a setting with unparalleled reach and coverage of children and young people, in which mental health interventions can potentially be administered within a structured setting. As well as increasing access to mental health treatment that might otherwise be unaffordable, schools provide a path to community and specialized mental health services.

They may also help normalize psychological treatment as well as reduce the need for acute psychiatric intervention [4]. Continuity of care may also be more likely as mental health clinicians can collaborate with school staff involved in the mental health children.

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**Received** 30 November 2020; **Accepted** 15 December 2020; **Published** 22 December 2020

There are many studies evaluating preventative mental health programs for children and young people (see Murphy et al. [5]). There are fewer evaluations for children with diagnosed mental health disorders although the number is increasing (see Fazel et al. [1], Stallard [6], Haugland et al. [7]). A 2016 systematic review [8] of 111 treatment outcome studies testing 204 treatment conditions for child and adolescent anxiety published between 1967 and mid-2013 identified 6 treatments that reached well-established status for child and adolescent anxiety, 8 as probably efficacious, 2 as possibly efficacious, 6 as experimental, and 8 treatments of questionable efficacy. The findings indicated that Cognitive Behavioral Therapy (CBT) has the most evidence, with several studies probably efficacious but lacking the experimental rigor of the CBT studies [8]. A recent RCT of 313 adolescents by Haugland et al. [7] showed positive results for both brief and longer CBT interventions, with significantly reduced anxiety, life interference and depressive mood symptoms. The authors concluded that brief CBT intervention for adolescents with anxiety was not non inferior to standard CBT in a school setting.

It has been argued that one of the main reasons that CBT is the "gold standard" treatment for anxiety in children is not necessarily because it is the most effective, but because it has been researched the most and has been subjected to the most randomised controlled trials (see David et al. [9]). A systematic review by Kallapiran et al. [10] demonstrated that mindfulness-based interventions can reduce mental health symptoms in both clinical and non-clinical child and adolescent populations [10]. Although there is growing interest in mindfulness-based approaches for young people in schools [11,12]. There are as yet few controlled trials, and even fewer focusing on children with diagnosed anxiety disorders. Results from a non-randomized controlled feasibility trial of a nine week mindfulness based intervention as part of the school curriculum in 522 secondary school students by Kuyken et al. [13] found support for acceptability and efficacy of mindfulness in schools in enhancing mental health and well-being.

A mindfulness-based therapy gaining rapid evidence for its effectiveness in children with mental health issues is Acceptance and Commitment Therapy (ACT). A recent meta-analysis [14] presented the results of a meta-analysis of 14 randomized controlled trials (RCTs) on the efficacy of ACT for 1189 children.

Findings suggested that ACT is significantly more effective than treatment as usual and untreated control groups in treating anxiety, depression and other mental and behavioral disorders, but not superior to traditional CBT [14]. However large sample sizes would be needed to detect the small effect size differences likely when comparing ACT and CBT. Most of these ACT school programs were preventative rather than focused on children with mental health disorders.

### Intervention: ProACTIVE ACT program for children with anxiety

The program being piloted in this study is “ProACTIVE”, a manualised group-based ACT program specifically designed to improve well-being in school aged children with an anxiety disorder. ProACTIVE was previously evaluated as an effective treatment for anxiety in children in a tertiary health care setting [15,16]. It was piloted in the current study for acceptability, feasibility and psychological benefits in a “real-life” setting in two schools, one primary and one high school.

Not only did the current study aim to determine feasibility of implementing the program in a school setting, it also investigated feasibility aspects such as willingness of participants and families to enroll in the study and participate in ProACTIVE, willingness of school counselors to recruit participants and engage in ProACTIVE and the suitability of outcome measures.

## Materials and Methods

### Participants

Two groups of school children, one primary and one high school participated in a pilot of ProACTIVE. Of the 16 children, five were male and 11 female, with a mean age of 11 years (range 8-14 yrs, SD=2). The two schools were Catholic systemic Western Sydney schools, and classed as a moderate socioeconomic advantaged group using the “My SchoolTM” [17] Index of Community Socio-Educational Advantage. This index is an indication of the socio-educational backgrounds of students [18]. Children were eligible if they met criteria for anxiety according to the Paediatric Anxiety Rating Scale

(PARS) or the Spence Child Anxiety Scale (SCAS) (either total score or one sub scale of the SCAS), child or parent scores.

Three school counselors (also registered psychologists) nominated themselves to participate. They completed formal training in ProACTIVE and had an average of 5.3 years (range 3-9 years) experience as a school counselor.

### Ethics

Consent was sought from school counselors, school principals, Catholic Education office Diocese of Parramatta, and parents for all children involved. The study had ethics approval from the Human Research Ethics Committee at the Children’s Hospital at Westmead Human Ethics Committee.

### Procedure

**Recruitment:** Referrals were obtained *via* information sent out *via* school newsletters inviting children with anxiety problems to participate in the research. The information outlined the nature of the treatment program and how to obtain further information if interested in participating. School counselors had a caseload of children referred to them by teachers, parents and self-referrals from children. Potential participants were also informed of the program and its potential utility reinforced. Advertisements were also placed around the school noticeboards. Potential participants' parents were instructed to either phone or email the school counselor if they were interested in participating in the study. If deemed eligible, the child was then offered a face to face assessment and parents a telephone assessment by a psychologist. If it was apparent at referral or following an assessment that the family would receive more suitable help elsewhere, the psychologists provided referral. Control subjects were recruited in the same way as treatment subjects.

Participants in the treatment group and their parents/guardian completed some standardized questionnaires and a 30 minute structured interview (PARS-see below): (i) prior to (ii) immediately after and (iii) 6 months after participating in the program. These questionnaires took approximately 20-30 minutes to complete and assess students' level of anxiety, depressive mood symptoms and quality of life.

**Table 1.** Modifications made for ProACTIVE to accommodate school setting (see Appendix 2 for Activity list).

Summary of original ProACTIVE program content	Modifications for ProACTIVE in schools
1. Introductions, psychoeducation, values, fear scale, acceptance exercises, introduction to mindfulness	Activity 2 (values-what is important to me) start for 10 minutes and complete at home with parents Complete Activity 3 (different types of feelings) and 8(mindful smiling first thing in the morning) at home. Omit Activity 6.
2. Mindfulness of the breath, mindful eating, thoughts/feelings and control, anxiety and my body, psychoeducation on acceptance, mindful walking	Complete Activity 12(what happens to my body when I get anxious)-for homework. Could reduce mindful breathing exercise to a few minutes, potentially use “Breath of Joy” as replacement ( See <a href="https://www.youtube.com/watch?v=5DVdmSa9nMc">https://www.youtube.com/watch?v=5DVdmSa9nMc</a> )
3. Mindful breathing, introduction to defusion, practice of defusion strategies, mindful-thinking worksheet, acceptance versus tolerance, rewards	Activity 17 (mindful thinking worksheet): Start for 10 minutes and complete at home with parents.
4. Body scanning, mindful-thinking worksheet practice, introduction to fear ladders (exposure), willingness and first attempt to create own exposure hierarchy	Activity 19 (body scan) shorten body scan exercise. Activity 20 (mindful thinking worksheet) start for 15 minutes and complete at home with parents.  Activity 22 (fear ladders) start for 10 minutes and complete at home with parents
5. Mindfulness using imaginal exposure, experiential avoidance and making room for our worries, mindful thinking for big worries, fear ladders for big worries	Activity 24 (riding the worry wave)-complete in 5-7 minutes by shortening script. Activity 27 (fear ladder for more difficult worries)-start for 10 minutes and complete at home with parents
6. Mindfulness practice and metaphors to help weaken the impact of thoughts, judging versus describing exercises, letting go of self-judgments, values and links with creating a life that is important and enjoyable	Omit activity 30 (acceptance). Activity 31 (working on more difficult worries): Participants to commence in session for 10 minutes, parents to assist complete for homework
7. Body scanning, mindful touch, dealing with setbacks/getting stuck, problem-solving skills building, preparing for real-life exposure	Activity 32 (body scan): Shorten body scan exercise by focusing on legs and arms rather than whole body. Omit Activities 34 and 35 (problem solving)

8. Mindfulness practice, assertive communication, in-session exposure related to fear ladders	Shorten activity 38 (worry wave). Activity 41 (becoming assertive) commence for 10 minutes and parents complete with child at home. Activity 42 (using "I" statements for assertiveness) by acting out each role play in one of the three ways (assertive, aggressive, passive) not all three for each example
9. Mindful breathing practice, coping with teasing, review of progress, in-session exposure	Activity 44 ( dealing with teasing) just do one role play
10. Friendly wishes meditation, reviewing goals, focus on values and guiding action, planning for the future, dealing with setbacks and celebrating success	Activity 46 (friendly wishes meditation) shorten to a few minutes. Activity 49 (proud moments) ask parents to complete in advance and email to facilitator.

**Modifications to program:** Details of the original ProACTIVE program and the modifications made to it in order to accommodate school constraints (e.g. a 1 hour session, and that parents were not attending sessions) are shown in Table 1. Generally, modifications included reducing the length of mindfulness exercises, and starting children with activities in session and asking parents to assist their child complete them at home. In order to facilitate communication with parents, weekly letters were sent home *via* children and email. Content included a summary of the session that week as well, activities to assist their child complete that were commenced in session, and suggestions to assist their child consolidate their learning. Each week parents were reminded of the availability of the Chief Investigator and their facilitators to answer any queries.

## Outcome measures

**Feasibility and acceptability:** We developed a questionnaire to be completed by school counselors online *via* Survey Monkey [19]. This survey (see Appendix 1) was adapted from a feasibility questionnaire used by other colleagues in our Department evaluating the feasibility of a social skills school program for autism [20]. We piloted this survey on school counselors who have previously undergone ProACTIVE training and implemented the program, and the survey answered our questions as well as not being burdensome on the counselors in terms of their time.

**Mental health outcome measures:** The Pediatric Anxiety Rating Scale (PARS) [21]: Is a clinician-administered instrument that assesses the frequency, severity, and impairment of common pediatric anxiety disorders and has been used as a primary outcome measure in several landmark treatment trials (see below for further information). It is used to rate the severity of anxiety in children and adolescents, ages 6 to 17 years. The clinician elicits information from both the child and parent, resulting in a child, parent and clinician rating. The PARS has two sections: The symptom checklist and the severity items. The symptom checklist is used to determine the child's repertoire of symptoms during the past week. The 7-severity item is used to determine severity of symptoms and the PARS total score. The PARS has been found to have high interrater reliability, adequate test-retest reliability, and fair internal consistency. Convergent and divergent validity are satisfactory [21]. Only five of the seven global items were used for the PARS in this study (PARS5). This is in keeping with most research studies that exclude the item assessing symptom count and the physiological symptom severity item given potential overlap with side effects from psychotropic pharmacotherapy (e.g. selective serotonin reuptake inhibitors) in children [22]. As a screening instrument, a cut-off score of 11.5 on the PARS5 has been found to effectively distinguish youth with an anxiety disorder and those without [22]). Optimum cut-off scores of 11.5 (5-item total score) and 17.5 (7-item total score) Based on the findings of Johnco et al. [23], our findings, a 15%-20% reduction in symptoms on the PARS5 optimally predicted treatment response [23]. Johnco et al. [23] found that optimal prediction of treatment response based on gold standard criteria was achieved at 15%-20% reduction in symptoms on the PARS5. A 25% reduction in symptoms on the PARS5 or a post treatment raw score cut-off of 9 optimally predicted remission status.

The Spence Children's Anxiety Scale (SCAS) [24] was used to assess child-and parent-reported anxiety symptoms. This measure contains 38 items that load on a single factor range from 0 to 114. Internal consistency and retest reliability are good [24]. The measure distinguishes anxious and nonclinical

children and has adequate convergent and discriminate validity.

The Child Anxiety Life Interference Scale (CALIS) [25]. The CALIS is a self-report measure that assesses life interference across school, family, peers/friendships, and physical health. Items are rated on a 5-point Likert scale from not at all to all the time. There is a child (CALIS-C) and parent form, the latter having two subscales of child (CALIS-P) and family (CALIS-F) interference. Test-retest reliability has been established as moderate ( $r=.66-.87$ ) and intraclass correlations( $r=.38-.74$ ) acceptable. Reliability estimates were found to be good at 0.80, and convergent validity has been established.

**Screening only:** The Child Depression Inventory Short-Form (CDI-S) [26] is a 10 item self-rated scale suitable for youths aged 7 to 17. The CDI:S was developed to provide a psychometrically sound way to quickly screen children for depressive symptoms. The CDI:S can be used when a quick screening measure is desired, when the examiner's time with the child is limited, or other similar situations. It has well established validity and reliability. CDI-S: Child Depression inventory (brief). This tool was only used as a screening tool to indicate if severe depressive symptoms were present. Children with major depression and active suicidality would then be referred to another program.

**Quantitative results of pilot program:** As seen in Table 2, all outcome scores showed improvements according to child and parent scores. No child in the pilot study had CDI scores indicative of severe depressive symptoms.

## CALIS

Of particular note is improved quality of life as evidenced by reduced interference by anxiety in the child and family's life (CALIS) scores. Child self-reported CALIS scores reduced by 50% from a mean score of 11.2 to 5.1, indicating movements from clinically significant anxiety life interference to only mild levels of life interference, with improvements maintained at the 6-month follow up. Parent reports of anxiety-related life interference for their child indicated reduction of 37% (15.8 down to 10), whilst the family impact score indicated reductions in interference by 56%, moving from a mean of 9.6 to 4.8, maintained at the 6 month follow-up with a slightly lower reduction in interference, meaning the child's anxiety interfered at low levels on the family's quality of life post and 6 months post (mean 3.3).

## SCAS

The mean pre SCAS scores of 34.9 represents a borderline clinical cut-off of 35 (SD 12.87) for both girls and boys combined [27]. Post mean scores of approximately 23 indicated anxiety symptom scores within the normal range, representing a 33% symptom reduction. Further reductions occurred at the 6 month follow up, with scores reduced by almost 50% compared with pre-scores. Table 1 shows similar results for the SCAS parent report, with mean scores reducing from 30.3 to 20.1, representing a one third reduction, with a slight increase to 24 at 6 months post-treatment. This increase at 6 months post is not a clinically meaningful difference.

## PARS

Regarding the PARS, measures were only available pre and post, as a decision was made further down the study that the PARS was too burdensome and therefore not feasible as an outcome measure for school counselors. PARS pre to post means indicated reductions in scores, with child self-reports moving from a mean of 9.9 to 6.9, parents 10.3 to 7.1 and composite 10.3 to

**Table 2.** Showing means and standard deviations PARS, SCAS and CALIS scores over time for participants.

Variable	Person	Time	N Obs	Mean	Std Dev	Min	Max
PARS	Child	Pre-intervention	16	9.9	3.8	4	17
		Post-intervention	16	6.9	4.1	0	12
	Parent	Pre-intervention	16	10.3	4.2	4	17
		Post-intervention	16	7.1	3.9	0	18
	Composite	Pre-intervention	16	10.3	4.1	4	17
		Post-intervention	16	7.5.9	5.3	0	18
CALIS	Child for self	Pre-intervention	16	11.2	5.2	2	16
		Post-intervention	16	5.1	4.2	0	13
		6 months	16	5.7	7.7	0	21
	Parent for child	Pre-intervention	16	15.8	3.5	13	22
		Post-intervention	16	10	5.1	2	17
		6 months	16	9.5	6.3	4	22
	Parent for family	Pre-intervention	16	9.8	5.8	5	21
		Post-intervention	16	4.6	4.5	0	13
		6 months	16	3.3	3.5	0	9
Spence	Child	Pre-intervention	16	34.9	14	20	55
		Post-intervention	16	23.1	11.4	11	48
		6 months	16	17.8	8.7	8	33
	Parent	Pre-intervention	16	30.3	11.4	11	44
		Post-intervention	16	20.1	9.8	4	37
		6 months	16	24	10	14	41

**Note:** Child for self=child’s self-report; Parent for child=parent’s perception of impact on anxiety of child’s quality of life; Parent for self=parent’s perception of interference of child’s anxiety on the family’s quality of life.

7.5. All mean PARS scores indicate a movement from the clinical to non-clinical cut-off of 9; in addition, they represent a reduction of 33%, 31% and 27%, which according to Johnco et al. [23] represent a positive treatment response.

**Feasibility and acceptability outcomes**

**Facilitator feedback:** The responses from the three school counselors regarding piloting the program were highly positive overall, with only a few recommended changes.

All counselors indicated that participants and their families were all willing to participate, with numbers filling up very quickly once invitations were made. Counselors were also very willing, so much so, that limits needed to be placed on schools as the study was not able to cater for all schools in the larger study at the same time. All counselors felt the size of the groups (6-8) and length of session (1 hr.) were “just right” for the program. They were satisfied with the amount of support received from both the school and the research team. They found the activities engaging, refreshing, and fun for the children. They thought the children’s group dynamic worked well, but it needed a co-facilitator (2 therapists per group) to facilitate it effectively. One counselor recommended that teachers also be trained in ProACTIVE to facilitate the children using some of the skills in the classroom. Another counselor’s perception was that some of the activities were too long; in particular, some of the mindfulness activities and session on fear ladders. All three counselors saw ProACTIVE as potentially being an effective preventative program for students without an anxiety disorder diagnosis.

Regarding challenges, all counselors reported that running the program in the final term of the year was challenging, due to the multiple activities occurring in the school curriculum at that time of year. It was also difficult to fit the 10 week program into the school term. However, allowing an extra two weeks towards the end of the term to practice the skills and then complete the program at the start of the next term was also seen as a potential positive. All counselors reported it was difficult to adequately cover fear ladders for each child as parents were not present and there were only two school counselors at each session. It was suggested that parents actively be encouraged to assist out of session prior to the first fear ladder session by working with their child to create scaffolding for a fear ladder, or at least have specific anxieties in mind to work on.

**Parent feedback:** Parent responses from the 16 parent representatives were overwhelmingly positive. Common themes were that the children learned helpful strategies to manage their anxiety, “My child tends to be difficult when bothered by something. Now he has more constructive ways to express and control how he feels” (P1).

Several parents also commented how their child seemed easily engaged and enjoyed the program, and reported having a great deal of fun. Parents also commonly reported that their child’s confidence and self-esteem were improved: “I enjoyed the confidence it gave my child to use the strategies” (P2). In addition to learning how to face and manage their fears, several parents noted that the mindfulness component assisted their child to regulate their emotion “my child responded very well to the mindfulness activities” (P3). Other noted how helpful the program was in encouraging their child to express their problems “She was comfortable to share her issues with another friend” (P4).

Another benefit of the program commonly reported was that their child no longer felt alone in their anxiety, and found it comforting that others had similar experiences and problems “The group being run at school helped my child realize that there were many other kids who struggled with anxiety” (P5). Whilst one parent reported it a concern that their child had become more aware of their worries, another reported it a benefit, as increased insight enabled them to learn how to manage their anxiety rather than being stuck in the experience. The positive aspect of integrating social skills and problem solving into an ACT program was also noted.

Regarding negatives, some practical issues included parents having to remember/remind their child to pack the child’s workbook each week and keep it clean. Often counselors had to photocopy pages in the workbook that day to compensate. Towards the end of the program leaving workbooks at school was trialed, but this meant limited opportunities for parents to assist child practice skills and know more about what had been covered in the program. Every attempt was made to keep parents informed, with letters sent home each week outlining what had been covered in session and practice tasks to complete in between sessions. One parent felt they should receive more updates-however, each week the coordinator sent out reminders to parents that they were welcome to contact the facilitator or the coordinator of the program for any queries. One parent noted they didn’t feel their child had her real concerns

addressed due to her shyness: "I think my child was still too shy to discuss things that she needed to work on i.e. talking to teachers..."(P6). Another parent commented that her child felt uncomfortable when other students asked her where she had been/was going to when the session were on: "It was challenging integrating back to normal day-explaining to others where she had been" (P7). The discomfort was also noted by another parent: "He actually felt embarrassed going" (P8).

The research team and counselors experienced pragmatic difficulties in organizing an agreeable time for parents to attend the two formal parent sessions conducted face to face by the school counselors. Most were working parents, or had activities to take children to after school, were cooking dinner or had evening activities. Although counselors did not complain, running parent sessions in evenings placed additional burden on their time. Counselors also reported it was difficult to determine whether parents had assisted their child complete activities in between sessions.

**Child participant feedback:** Responses from the 16 children were overwhelmingly positive. Consistent with parent comments, a common theme was the enjoyment experienced by children being part of a group and participating in fun activities. A sense of feeling more normal and less alone was commonly described, and an appreciation of being able to share their feelings. Several children commented on how helpful mindful breathing was in managing their anxiety, and defusion techniques such as saying things in a funny voice and thanking their mind; assertiveness especially dealing with teasing, and working on their fears gradually using fear ladders. Almost all children commented that ProACTIVE was a fun way to learn the skills. Most enjoyable were defusion and acceptance activities (e.g. Chinese finger traps, describing versus judging), one child noting "it felt like a game rather than work".

The main negative noted by participants was that they did not like missing out on school time. One child remarked not wanting attention to be drawn on him by being taken out of class.

### Feedback on parent sessions conducted by school counselors

Two parent sessions were conducted: One at the start of the program and one in week 7, during an evening timeslot to attempt to accommodate families' commitments. These sessions had low attendance rates (40% initial, 20% second). Parents commonly reported that it was difficult to attend these sessions due to other commitments. Those who did attend reported finding them informative not only about what the program would encompass, but how they could assist their child cement the skills learnt.

### Adjustments made to ProACTIVE following pilot

- As a result of the above feedback the following adjustments were made to the ProACTIVE program in preparation for the larger trial:
- Conducting sessions either side of lunchtime so students to minimize class disruption and attention being drawn to students.
- Increasing communication with parents (email and letters, more details, reminders they can phone)
- Ensuring parents had completed preliminary work with their child in developing a fear ladder that could be applied in session taking into account school environment (e.g. social anxiety: using eye contact and smiling to people when they say hello, viewing images of spiders/cockroaches)
- Having children with similar fears undergo exposure therapy together under the guidance of the therapist (e.g. giving a speech, taking turns to telephone shops and make enquiries)
- Reducing amount of material in session. Specific details can be found in Table 1 and Appendix 2. Some examples included reducing the length of mindfulness exercises, commencing activities in session and completing them at home with parents (letter sent each week to inform parents)

- Development of live webinars for parents in lieu of face to face information sessions, recorded for later groups.

## Results and Discussion

The purpose of this pilot study was to trial an ACT-based anxiety group treatment program (ProACTIVE) for children in a "real world" school setting, with indirect parent involvement. Overall results found support that ProACTIVE delivered by school counselors with less parent involvement improved anxiety and quality of life in children with anxiety. There was a 50%-57% reduction in life interference scores for the child (depending on child or parent rated), and 37% for the impact on family quality of life. Similarly, anxiety symptom scores as measured by the SCAS were improved by approximately one third as rated by both child and parents, with further improvements at the 6-month follow up. The interview scores using the PARS yielded similar findings from pre to post treatment, with improvements of around 30%, which represents a positive treatment response.

Qualitative findings from counselors, parents and children were overwhelmingly favorable. Overall the responses indicated that ProACTIVE was clear in its structure and transferable to a school setting. Both children and the facilitators found the activities engaging, refreshing, and fun for the children. Whilst it is possible that there may have been a positive impression bias, all responses were anonymous and no questions were leading.

Therapists reported it was challenging to conduct in session exposure when only two therapists were available for up to eight children, and the context was within the physical school setting. One of the dilemmas that running a group program in school that was apparent from feedback is that some children reported being embarrassed or uncomfortable about other students knowing they were attending the group. In spite of discretion used by teachers and counselors, and importance of confidentiality in the group discussed with students and parents, it is not possible to prevent other students asking what group the child is attending. The potential discomfort arising is hopefully superseded by the benefits not only of learning skills to assist manage their anxiety and improve their quality of life, but also the benefit of being in a group where several children noted the therapeutic benefit of knowing they were not alone in their experience, normalizing their feelings and emotions, and feeling supported by others.

Findings also indicate a high level of willingness of participants and families to enroll in the study and participate in ProACTIVE, willingness of school counselors to recruit participants and engage in ProACTIVE and the suitability of most of the outcome measures. However, there were some indications that the PARS interview was onerous for both participants and assessors. This is not such an issue for the current study, but there are question marks raised from this pilot about the use of the PARS as a sustainable outcome measure if measurement were to fall on school counselors who are already heavily burdened with workloads.

## Conclusion

These findings help inform the next phase of the study, using a Quasi RCT with a larger sample and across several schools. The findings indicate that ProACTIVE is feasible to conduct in a "real life" school setting despite the challenges of accommodating school timetables and variations in curricula. The findings also indicate that ProACTIVE is highly acceptable, with school counselors, children and parents overwhelmingly giving favourable feedback on the program.

## Limitations

The study had several limitations. First, as a feasibility study we did not have a comparison group and were not able to randomly assign schools or students. Therefore, it is difficult to know whether the passage of time would have resulted in improvements in outcomes or if it was the treatment. External

validity is limited due to lack of random assignment of schools or students. Also, we selected schools interested in the program, that were also ready to participate in our study. To test the generalizability of the intervention larger scale studies should extend to a greater diversity of schools. Similarly, future research should extend to a broader set of school counselors/facilitators, assessing intervention fidelity. Our study also used a small set of self-report measures, and there were concerns about the feasibility of continuing the interview component of outcomes (PARS) due to the drain on resources it might pose for counselors in the future and well as pragmatic aspects of time to organise and conduct interviews. Findings are limited by the small sample size limiting generalizability to other settings.

## Implications for research, policy and practice

To our knowledge this is the first study to test the feasibility of an ACT program for children and adolescents with anxiety disorder in schools. The next phase of work involves an appropriately designed, pragmatic randomised/quasi randomised controlled trial, with follow-ups, powered to examine key processes and outcomes that pay close attention to generalizability. Although schools-based interventions can sometimes be implemented as a result of short-term policy or "flavour of the month" innovations, interventions that demonstrate acceptability, efficacy, cost-effectiveness and potential for implementation are most likely to be sustainable. This feasibility study is the first step towards evaluating ProACTive in schools and provides preliminary evidence of acceptability and efficacy. Findings of the next phase will be reported when completed.

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**How to cite this article:** Hancock, karen, Houseman Anoushka, Dixon Angela, and Hainsworth Cassandra, et al. "The Feasibility and Acceptability of a School-Based Acceptance and Commitment Therapy Program for Anxiety in Children: A Pilot Investigation." *J Child Adolesc Behav* 9 (2020): 388